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SPEECH FRIGHT IN THE ELEMENTARY SCHOOL, ITS RELATIONSHIP TO SPEECH ABILITY AND ITS POSSIBLE IMPLICATION FOR SPEECH READINESS.

BY- SHAW, IRWIN
WAYNE STATE UNIV., DETROIT, MICH.

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THE RELATIONSHIP OF ELEMENTARY SCHOOL STUDENTS' SPEECH FRIGHT TO THEIR SPEECH ABILITY, SPEECH ATTITUDES, AND SPEECH READINESS WAS STUDIED. SURVEYS WERE CONDUCTED AND DESCRIPTIVE DATA WERE COLLECTED ON SPEECH FRIGHT LEVELS AND SPEECH ABILITY OF 1,166 STUDENTS IN SELECTED ELEMENTARY GRADES. ATTITUDES OF TEACHERS TOWARD SPEECH FRIGHT WERE ALSO ASSESSED. IN ADDITION, VARIOUS INTROSPECTIVE TESTS OF SPEECH FRIGHT HAVING CERTAIN PREDICTIVE VALUE WERE DEVELOPED. A PILOT STUDY WAS CARRIED OUT PRIOR TO THE MAIN STUDY TO REFINE METHODOLOGY, TESTS, AND TECHNIQUES. THE STUDY SUCCEEDED IN DEVISING VARIOUS MEASURES FOR SPEECH FRIGHT WHICH COULD BE OF VALUE TO THE ELEMENTARY TEACHER. IT WAS ALSO FOUND THAT AT LEAST 20 PERCENT OF THE CHILDREN ARE CONSIDERABLY AFFECTED BY SPEECH FRIGHT. NO APPARENT RELATIONSHIP BETWEEN SPEECH FRIGHT AND SPEECH ABILITY WAS FOUND, AND THE EVIDENCE DID NOT INDICATE THAT A CHILD MAY BE MORE READY TO SPEAK AT ANY SPECIFIC GRADE LEVEL. SEVERAL AREAS OF THE STUDY OF SPEECH FRIGHT THAT NEED FURTHER RESEARCH WERE DESCRIBED. (GD)

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SPEECH FRIGHT IN THE ELEMENTARY SCHOOL, ITS RELATIONSHIP TO SPEECH ABILITY AND ITS POSSIBLE IMPLICATION FOR SPEECH READINESS.

by
Irwin Shaw

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John C. Sullivan
Rupert L. Cortright
George V. Bohman
Leonard Leone

APPROVED BY:
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PREFACE

This research was supported by a grant from the United States Office of Education. The Jack Wolfram Foundation was in part responsible for one year of graduate work and was the stimulator for my interest in this problem. The study was done under the direction of my advisor, Dr. Raymond Ross, who deserves special thanks for his encouragement, forbearance, and creative efforts in fostering its completion. My co-researcher, Sally McCracken, merits praise for sharing in the preparation and collection of material in the schools which were chosen for observation. Together we owe a debt of gratitude to the children, teachers, principals, and administrators at the Dossin School, Holmes School, Herman School, Blessed Sacrament Cathedral School, St. Louis the King School, and Our Lady Queen of Heaven School, who permitted us to work in their schools. Their interest and cooperation were greatly appreciated.

This study was given strong support by the grant co-director Dr. John Gaeth. Dr. Doris Allen should be given

credit for suggestions on statistical analysis. Dr. Rupert Cortright, our expert in general elementary speech education deserves credit for his generous counsel.

Professor Leonard Leone, Professor John Sullivan, and departmental chairman Professor George Bohman, other members of my dissertation committee, also deserve special mention.

My wife Nancy, and our children deserve special praise for their patience and courage.

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CHAPTER I

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CHAPTER I

Problem and Review of Literature

Introduction

The question of speech fright at the elementary grade level was considered serious enough in terms of empirical observations that the U.S. Office of Education granted $9,000 to Wayne State University to further study the problem.[1] The grant was directed by Drs. R.S. Ross and J. Gaeth, both Professors of Speech. This thesis is a direct result of the grant, in which the writer was the principal research fellow.

A. Identification of Problem

What is the typical speech fright level or pattern for the elementary school child? To what degree is it prevalent among the grades? Is there a relationship between poor speaking ability and high speech fright? Answers to these and other questions could not be found in the literature. The literature as will be described does, however, answer some of these questions with respect to students at the college level. It is reported that as many as 30 per cent of the college students taking a basic speech course consider speech fright a severe problem.[2] The literature also reports that, as the college student learns to control his speech fright, his speaking ability improves.[3] At the elementary school level, no information was found concerning what percentage of children are severely bothered by speech fright or the relationship between speaking ability and speech fright. These questions of speech education in the elementary grades previous to this study remained unanswered.

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[1] Grant title: Project S-355 (Speech Fright Problems of Grade School Students)

B. Purpose of Study

This study attempts to describe the extent of speech fright within the elementary classrooms at selected grade levels and how this fright may be related to speech ability, speech attitudes, and perhaps a concept of speech readiness.

C. Description of Study

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[2] A. C. Baird and F. H. Knower, General Speech (New York, 1963), p. 119.

[3] F. Stanley Paulson, "Changes in Confidence During a Period of Speech Training: Transfer of Training and Comparison of Improved and Nonimproved Groups of the Bell Adjustment Inventory," Speech Monographs, XVLLI (November, 1951), 260-265.

1. Objectives of Study

   1) The primary objective of the project is to survey and provide descriptive data on speech fright levels and speech ability of students in selected elementary grades. It is designed to determine if specific problems observed and reported casually are at all representative, and if the presence of speech fright appears to be serious enough to cause problems which might interfere with other educational goals.

   2) The second objective is to assess the attitudes of teachers toward speech fright and to determine if they are cognizant of the phenomenon and prepared to aid in its alleviation.

   3) The third objective is an attempt to develop various introspective tests of speech fright[4] which will have predictive value in revealing speech fright in elementary school children.

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[4] With respect to this study, introspective tests are tests in which the child reveals his feelings and attitudes about speech fright.

2. Nature, Location and Population of Study

This is a descriptive study of speech fright and speech ability during the first seven years of formal schooling (kindergarten through sixth grade). The schools that were selected are three large Detroit Metropolitan City elementary schools. A total of 1,166 children and 28 teachers were involved in this study. Of the 1,166 children, 921 were involved only with the introspective tests for speech fright; the other 245 children were personally observed and tested on speech practices with respect to speech ability levels and the extent of speech fright within each of the selected grades. The in-depth data came primarily from students in the kindergarten, second, fourth, and sixth grades. In addition, three parochial schools and forty-five first, third, and sixth grades were involved in a pilot study.

3. Definition of Terms

There are four central terms which are important to this study; they are: (a.) Speech Ability, (b.) Speech Readiness, (c.) Speech Attitude, (d.) Speech Fright.

The following definitions were used operationally:

a. Speech ability is a composite picture of thought (organizational skill), language voice and action.[5] By evaluating each of these components, an observer attempted to assess the degree or level of speech ability.

b. This writer defines speech readiness as the most propitious time for the child in terms of grade, maturation, or age to stand up and speak in front of the class in order that the child can enter into this occasion or experience with "meaning, interest, and the probability of satisfying achievement."[6]

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[5] Woolbert, in his early textbook *Better Speech* (New York, 1922), pp. 23-24, defines speech as this "kind of four-cylindered affair." A speaker can hold an audience's attention, said Woolbert, "if he shows he has thought the thing out . . . if he uses words and sentences well . . . if he speaks in a voice so rich . . . if he shows his bodily actions. . . ." Thus he defined thought, language, voice and action. More recent books, such as R. T. Oliver and R. L. Cortright, *Effective Speech* (New York, 1961), p. 6; or C. Cherry, *On Human Communication* (New York, 1957), define speech in a similar way. Speech, according to Oliver and Cortright, is ". . . using voice and articulation . . . (is) using visible symbols . . . (is) using oral language," p. 6. Speech, according to Cherry, is using " . . . both a visible and aural set of signs" via the articulatory process, p. 147.

[6] Hollis Caswell, in "Guiding Principles in Curriculum Development at the Elementary School Level," *Quarterly Journal of Speech*, XXIX (February, 1943) 81-87, elaborates on this definition. He indicates that educators need to think more about such a concept of speech readiness. He

c. This writer defines speech attitude as the negative or positive feeling of an individual concerning the prospect of getting up and speaking before a group.

d. Speech fright was considered as the fear of an impending ill brought about or triggered by the public speaking situation. Since speech fright is considered a varied or multiordinal phenomenon, it would be desirable to define speech fright within the context of the measuring agent. This writer has utilized Clevenger's admonition that "what measures defines."[7] Since in this dissertation speech fright was measured in two ways: (1) By introspective tests, and (2) Through researcher's observation, it would, therefore, be

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states that "if the forced exposure is incompatible with the child's readiness or stage of growth, the time of both the child and the teacher is wasted, for the meaning attached to such an experience will be usually erroneous."

[7] Theodore Clevenger, Jr., "A Synthesis of Experimental Research in Stage Fright," Quarterly Journal of Speech, XLV (April, 1959), 135.

desirable and more realistic to define speech fright as determined by introspective tests and by researcher's observation in order to better realize the limitations intrinsic to the measures. Because speech fright may manifest itself differently in terms of individual behavior, clear-cut perceptions of this phenomenon are difficult. Dickens et al. indicate that observers tend to underestimate students' fears rather than to overestimate them in the speaking situation.[8] This study has tried to minimize factors which are intrinsic in distorting a picture of speech fright by carefully taking into account the kinds of introspective tests used and the different signs of speech fright. With respect to the introspective tests, the child's language as well as the child's inability to express degrees of feeling were taken into consideration by the tests which were devised.

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[8] M. Dickens, F. Gibson and P. Caleb, "An Experimental Study of the Overt Manifestations of Stage Fright," Speech Monograph, XVII (March, 1950), 37-47.

> With respect to observed speech fright, signs of reticence or agitation were taken into consideration. It should be pointed out, however, that even teachers of speech are in more agreement as to what constitutes the absence of speech fright than what it is.[9]

D. Purview of this Dissertation

The remainder of this chapter is devoted to literature related to this study; namely, studies in speech fright or speech anxiety, and studies in speech abilities.

Chapter II is a report on the pilot study which was carried out in order to refine the methodology, tests and techniques used in the main study.

Chapter III reports the subjects, materials, and general procedures used in the main study.

Chapter IV reports the presentation and interpretation of data.

Chapter V reports the summary, conclusion, and implications.

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[9] Clevenger, p. 145.

E. Review of Literature

1. Anxiety Literature Related to this Study

In recent years increased attention has been given to stage fright, or to what is more accurately called speech fright, in both speech articles and speech textbooks.[10] It might be imagined that every person would feel it a joy to unfold his thoughts in speech-making and that his audience would accordingly take delight in this oral expression. Allport points out, however, that audiences prefer more purposeful communication;[11] and it may be further added that not every speaker is self-confident in his powers to influence his fellowman's behavior. Even children seem often to have conflict in unfolding their thoughts in speech-making, for Sarason reports with respect to a study of elementary children from the Oklahoma City area in 1956 ". . . that among the items and situations most frequently feared were stage fright. . . ."[12]

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[10] Theodore Clevenger, Jr. and Gregg Phifer, "What do Beginning College Speech Texts Say About Stage Fright?" The Speech Teacher, VIII (January, 1959), p. 1.

[11] Floyd Allport, Social Psychology (New York, 1924), pp. 193-198.

[12] Seymour Sarason, Kenneth Davidson, Frederick Lighthall, Richard Waite and Britton Ruebush, Anxiety in Elementary School Children, A Report of Research (New York, 1960), p. 43.

Eisenson et al. suggest in their interpolated stage fright formula a felt lack of confidence which people have in their ability to persuade through speech-making.

> Subject's estimate of probability (of his own ability to persuade) X Value to the subject of the gain or loss (in succeeding or failing to persuade) = Tendency to perform that particular act (of making an effective speech).[13]

Lack of self-confidence and fear of audience may often cause the speaker to become cautious, coping, and restrained in speaking in front of an audience. Thus, the speaker comes to feel anticipation anxiety or speech fright. Whether or not this anticipation serves to prod the speaker to make a greater effort is a question that is still open to investigation.

a. Causes of Speech Fright

There have been many explanations for speech fright. Hollingworth, one of the earliest writers on this subject, sought to see the causation of stage fright as having occurred in the past for the speaker, so that the present audience situation has elements of a past situation which resulted in fear and has continued with fear.[14] This early writer (1935) recognized many of the prevalent theories as to the causes of stage fright and which will now be discussed.

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[13] Jon Eisenson, J. Jeffrey Auer and John V. Irwin, The Psychology of Communication (New York, 1963), p. 324.

Rollo May, although he speaks primarily of general anxiety rather than of speech fright, points out that when a person perceives that much is at stake in terms of his winning or losing, or the acceptance that he thinks he must have from others, there is a greater likelihood of his feeling anxiety in this situation which he has empowered.[15] A parallel can be made to the speaking situation. If a speaker perceives his audience as having a great deal of power over him, then he will probably feel more speech fright than if he perceives them in a less threatening way. Once a speaker has given a certain power to his audience, he must then consider the evaluation they will give him. Thus, the speaker will become more anxious about his ability to speak when he perceives the audience as judges rather than as all-accepting and neutral observers. Paivio and Lambert state the perceptual cause for speech fright this way: "(Speech fright). . .

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[14] H.L. Hollingworth, The Psychology of the Audience (New York, 1935), pp. 205-226.

[15] Rollo May, The Meaning of Anxiety (New York, 1950), pp. 151-189.

whether actual, imagined, or anticipated, is anxiety arousing for the performer because of the possibility of unfavorable evaluation."[16] Eisenson et al. also bring out this point on perceptual causation when they state, "Self-confidence is largely dependent upon a sense of personal adequacy to meet a situation."[17]

Sarason agrees with these others that the speaker's perception of his audience will influence his level of anxiety, but he feels that some speakers may be as afraid of success with the audience as other speakers are of failure. It is possible, then, for speech fright to be derived from the speaker's fear of success rather than from his fear of failure, particularly if this signifies a loss of dependency.

> It is in fact this perceived threat to the fulfillment of his dependency needs which not only serves as a control against overt expression of hostility but also motivates behavior which will insure the possibility of satisfaction of his dependency needs.[18]

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[16] Allon Paivio and Wallace Lambert, "Measures and Correlates of Audience Anxiety (Stage Fright)," Journal of Personality, XXVII (1959, March) p. 1.

[17] Eisenson, Auer and Irwin, p. 325.

[18] Sarason et al., p. 14.

Sarason develops this perceptual view further, so that it becomes basically Freudian, when he regards anxiety as the emotion generated by the threat of some fearful occurrence in terms of arousal of fantasies, of aggression, of loneliness, of guilt, and of separation. Sarason indicates that some children do poorly on tests and in speaking situations for the very reason that a success experience could bring up thoughts and feelings with which the child could not adequately cope. This line of thinking is not developed within the speech literature.

The Lewinian school views anxiety as stemming primarily from unrealistic self-expectation by the individual. Such an over-reaching makes the individual "feel" failure and consequently he becomes more unrealistic in his future undertakings.

> P. Sears found the average positive discrepancy (that is the amount by which the level of aspiration exceeds past performance) to be greater in children after failure than after success, indicating a greater degree of realism after success than after failure.[19]

Thus, in terms of speaking, if a speaker chooses a topic that is beyond his capabilities to deliver well, or should he speak in front of an audience whose comprehension demand is more than he can meet, he will then probably feel he has failed. Ironically, rather than lower his self-expectations, he will raise them.

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[19] Kurt Lewin, Field Theory in Social Science, edited by Darwin Cartwright (New York, 1951), p. 289.

Eisenson et al. also sight as another prime factor in speech fright the conflict that exists in the speaker's mind concerning giving to or withholding from the audience. Here the speaker sees the presentation as a form of giving, and giving means to the speaker a loss of himself. He wants to give, but great apprehension of loss brings about a fear. Eisenson labels this cause of speech fright an "approach-avoidance" conflict.

> The speechmaking situation often has just these positive and negative elements. On one hand an individual may be possessed of an idea that he feels impelled to communicate to an audience,but on the other hand he may also feel apprehensive about the very act of communicating. He may fear to do what he wants to do.[20]

Goldstein, Lomas and Ross suggest that speech fright may be primarily a biological phenomenon in its essence, rather than a psychological or existential one. Goldstein points out that a person reacts in a Gestalt way to a given task with the result that, if he does not master that task or fears that he is not able to master that task, he simultaneously experiences an emotional upheaval. He says:

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[20] Eisenson, Auer and Irwin, p. 323.

> It can be grasped only from the biologic point of view . . . we know that each organism is unreceptive to certain environmental events. If these are very powerful, however, they do force themselves on the organism. They do not produce orderly harmonious responses, but rather disorderly, disharmonious, defective performances, climaxing in catastrophies with all their concomitants, particularly anxiety.[21]

Ross, along with Janies, indicates that "Nature's physiological provisions typically prepare us for flight or fight."[22] This is a phenomenon that Ross reports may unfortunately result within the speaking situation. Earlier Lomas (1937) evolved this school of thought when he indicated that stage fright is basically a thalamus reaction so that the cortex has really no control over it.[23] He further states "Stage fright does not differ in chemical or visceral components from the strong emotions characteristic of vigorous and effective speech."[24]

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[21] Kurt Goldstein, Language and Language Disturbances (New York, 1948), pp. 11-12.

[22] S. Raymond Ross, Speech Communication, Fundamentals and Practice (New Jersey, 1965), p. 25.

[23] Charles Lomas, "The Psychology of Stage Fright," Quarterly Journal of Speech, XXIII (1937, February), p. 41.

Perhaps Clevenger and Phifer, in analyzing what beginning college speech texts say about stage fright in terms of causation, best summarize the current thoughts about causes:

> The causes of stage fright, then, are variously listed as basic personality deviations, conflict, adverse conditioning, faulty evaluation of psycho-physiological manifestations, unfamiliarity of the speech situation, complexity of the speech situation, and failure to prepare for the performance. Many textbooks list more than one cause; some list more of these given here.[25]

b. Methods of Controlling Speech Fright

The literature reflects that the speech teacher is more concerned with the control of speech fright than in realizing its causation and resolution. As Clevenger and Phifer say, "Cures outnumber even causes. . . ."[26] And, as they further point out, the control of speech fright in the speech textbooks can be grouped into four categories:

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[24] Ibid.

[25] Clevenger and Phifer, p. 4.

[26] Ibid.

1. Techniques that operate in a general way on the speaker well in advance of his performance
2. Techniques of speech preparation
3. Techniques to employ immediately before rising to speak
4. Techniques to employ while speaking[27]

By way of a general philosophy prior to the speaking situation, there are several reflections which the various authors make. For the most part, it is suggested that the speech teacher explain to the student that he should not become overly concerned with his bodily physiological processes. Jones states that, "If you are bothered by stage fright . . . take comfort in the knowledge that it is the common lot of good speakers . . . learn to live with it."[28] Ross further counsels the student by suggesting that, "Objectification of the emotional reactions tends to take the edge off of emotion, making it easier to control."[29] Thus, if the student is alerted to possible physiological reactions, he will be more able to recognize and control them. Besides learning to accept physiological changes, Clevenger and Phifer find that many of the current speech textbooks, because of the recent influence from the fields of semantics and educational psychology, recommend that ". . . the speaker learn to expect less of himself . . . and learn to live with his stage fright. . . ."[30]

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[27] Ibid.

[28] Winston E. Jones, A Guide to Effective Speech (New York, 1961), pp. 216-217.

[29] Ross, p. 33.

The literature endorses adequate preparation for the speaker as one of the primary methods toward controlling speech fright. Clevenger and Phifer regard adequate preparation as one of the major recommendations for the control of speech fright.[31] Robinson states, "Adequate preparation should include such items as 1) thorough understanding and application of the principles of speech composition and arrangement. . . ."[32] Lomas adds that, if the speaker adequately prepares and makes the ideas his own, he will reduce his stage fright.[33] Bean, a psychologist of the learning school, suggests that perhaps a good way to prepare is to over-learn the material. "The best way to cure stage fright is the . . . over-learning of the part to be presented."[34] Thus, no matter how they counsel the student to prepare, all feel that preparation is necessary. As Eisenson et al. state, "There is ample evidence to suggest that stage fright seldom attacks speakers who focus upon the task rather than self."[35] If one is to focus upon the task of speaking, he must, therefore, work upon his material for presentation.

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[30] Clevenger and Phifer, p. 5.

[31] Ibid.

[32] Edward R. Robinson, "What Can Speech Teachers do About Students' Stage Fright," The Speech Teacher, VIII (January, 1959), p. 12.

[33] Charles Lomas, "Stage Fright," Quarterly Journal of Speech, XXX (December, 1944), 483.

The following recommendations were found in Oliver and Cortright: (just before rising) "Relax in your seat, breathe deeply . . . let your chin sag upon your chest . . . calm the turmoil in your mind by thinking of the opening sentence of your speech. . . ."[36]

Once the speaker is addressing an audience, the literature suggests that the student should, if he is still bothered by speech fright, utilize purposeful action so that much of his energy or anxiety may be drained off. "Hence, a speaker can gain control of his body and help to overcome his stage fright by moving about on the platform and gesturing."[37] Eisenson et al. agree with this point and say, ". . . employing purposeful bodily action while speaking (reduces stage fright). . . ."[38] Clevenger and Phifer indicate that many speech textbooks draw inspiration from the James-Lange theory which asserts that, if the speaker will only act confident in terms of his bodily action, he will come to feel that way.[39]

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[34] J. C. Bean, "Serial Learning and Conditioning Under Real Life Stress," Journal of Abnormal Social Psychology, LI (November, 1955), 550.

[35] Eisenson, Auer and Irwin, p. 325.

[36] R. Oliver and R. Cortright, Effective Speech (New York, 1962), p. 70.

Because some stimuli upset a person's equilibrium and create a state of dissonance, e.g., a sudden awareness of a mistake may throw a person off balance, Baird and Knower suggest that the speaker be aware of his common emotional reactions, be able to talk about them, and be able to specifically resolve personal conflicts which cause this dissonance.[40]

Robinson investigated thirty-five contemporary speech textbooks in order to determine the methods which were recommended most often in teaching speech. He found that, out of

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[37] *Ibid.*, p. 335.

[38] Eisenson, Auer and Irwin, p. 326.

[39] Clevenger and Phifer, p. 6.

[40] A. Craig Baird and Franklin H. Knower, *General Speech* (New York: 1963), p. 124.

136 specific methods recommended for developing confidence, the following tabulations resulted: "control of bodily activity (71); emphasis on knowledge of the subject and preparation (42); emphasis on the 'message' of the speech (23)."[41] Robinson, in his study, found that many of these "cures" for speech fright aided the student.[42]

c. Speech Fright Symptoms and Definition

The literature, within its more generalized definitions of speech fright, reveals that some of the major symptoms which the speaker experiences can be described in such terms as fear, flight, and pain. Greenleaf states: "Speech fright is an evaluative disability occurring in a social speech situation and characterized by anticipatory negative reactions of fear, avoidance, and various internal overt manifestations of tensions and behavioral manifestations."[43] Low has a less abstract definition, based more on the symptoms:

> Stage fright is the emotional disturbances and mental and physical behavior of the speaker as

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[41] Eisenson et al., p. 324.

[42] *Ibid*.

[43] Clevenger, *Op*. *Cit*. (above, note 7) p. 134.

> manifested by poor eye contact, nervous hand movements, restless shifting of feet, awkward posture, quivering of the body, timid voice. . . .[44]

Janis defines speech fright in terms of audience sensitivity and further tries to substantiate this fright with a social inadequacy inventory.[45] Simon reported that stage fright was related to the ability to integrate under stress.[46] Dickenson et al. define stage fright this way: "Conventionally the term stage fright is used to describe what happens to a speaker . . . when he is both attracted to and repelled by the same stimulus (the audience)."[47]

Within the literature, it is primarily Clevenger who emphasizes the point that any operative definition of speech fright must take into account the "tool" or the means of measurement which aids the researcher in understanding and appreciating the phenomenon. The above definitions all reflect this, in that each tells of some type of measurement that will be used to determine the stage fright. However, when the researcher asks the speaker if he had speech fright, the thought and the language used are crucial factors. The researcher may believe that the person he is questioning with regard to speech fright has the ability to report his feelings with a relative accuracy; and, furthermore, that the subject and researcher are giving the same connotation to certain words or terms, especially in terms of relative intensity. Such an assumption by a researcher may be misleading and thus invalidate the definition of speech fright. This weighted value of words and feelings is further complicated, as Clevenger points out, when the researcher tries to determine any correlation between the different measurements for stage fright.

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[44] Gordon Low and Boyd Sheets, "The Relation of Psychometric Factors to Stage Fright," *Speech Monographs*, XVIII (November, 1951), p. 267.

[45] I. L. Janis, "Personality Correlates of Susceptibility to Persuasion," *Journal of Personality*, XXII (June, 1954), 504-578.

[46] Clarence T. Simon, "Complexity and Breakdown in Speech Situations, Journal of Speech and Hearing Disorder, X (September, 1945) p. 202.

[47] Dickenson et al., p. 320.

> Results of comparisons of various indices of stage fright suggest that the emotional disturbance which is recorded on a physiological measuring device is different from both the emotional disturbance which the speaker reports having experienced and the emotional disturbance which a group of judges report having observed and that the latter are different from each other.[48]

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[48] Theodore Clevenger, Jr., "A Synthesis of Experimental

ence, a workable definition of speech fright cannot be divorced from the measuring instrument, and the measuring instrument must be carefully described to increase the likelihood that both the subject, judges, and researchers are applying similar weighted values to the words and terms used. In actuality then, the measuring instrument in a stage fright experiment is not only the measurement of stage fright, but it is the definition as well.

Clevenger and King define speech fright as "the speaker's report of cognitive experience, his measurable physiological change and the observable pattern of his behavior."[49] Here we note the use of three different ways to evaluate the speaker's response and the acceptance of the different variables involved in them. "If one adopts the position that there are three different variables and maintains the distinctions among them, conflicts between studies disappear and the entire body of research assumes an orderly structure."[50] As further proof of the existence of these three

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Research in Stage Fright," Quarterly Journal of Speech, XLV (April, 1959), 135.

[49] Theodore Clevenger, Jr., and T. R. King, "A Factor Analysis of the Visible Symptoms of Stage Fright," Speech Monographs, XXVIII (November, 1961), p. 296.

[50] Clevenger, op. cit. (above, note 48), p. 136.

[illegible] variables, [illegible]. Thus, on the college level, the three phenomena of stage fright are not strongly correlated. "Between [illegible] measures of experienced stage fright and observational indices of certain specific behaviors, a positive but weak relationship prevails."[51]

This study will use the definition of Clevenger concerning stage fright. Thus, this study recognizes the existence of these three variables. It then becomes a question as to whether or not the three variables will be more correlated in the elementary school where adult sophistication is lacking and where the children are perhaps more unified. The answer to this question is relevant to this dissertation, for should this study indicate that these three variables are more correlated at the elementary level, it may very well suggest how fragmented the adult becomes. The question then remaining will be: what role does early education play in helping to create this fragmentation?

d. Measurements of Speech Fright

As previously indicated, speech fright can be measured in three ways: by self-report, through the various devices used for recording bodily or physiological changes, and by mind of the observer. As was also stated previously, any one of these types of measurement may have a high degree of reliability, but it is true that the various indicators of stage fright are not in themselves correlated. Dickenson et al. states: "Any of these methods may have very high reliability, although instruments measuring different dimensions of stage fright often seem to have comparatively poor inter-correlations.[52] Thus, the three types of measurements are measuring three separate variables involved in stage fright. It may be that, in actuality, there exists little correlation between these variables. ". . . the results of this analysis point toward the conclusion that 'observable stage fright' is not a simple or unitary variable."[53]

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[51] Ibid.

In attempting to have the speaker evaluate his own feelings concerning speech fright, there have been several questionnaires devised. Chenoweth,[54] (introspective "Case history"); Gilkinson,[55] (PRCS); Low and Sheets,[56] (psychogalvanic tests); and Ross and Osborne,[57] (questionnaire), have all worked in this area.[58] These scales are used with older students and adults. For example, the Ross-Osborne questionnaire and the Gilkinson questionnaire ask questions which several symptoms of stage fright or lack of self-confidence. If the student indicates that these symptoms have for him an extraordinary strength, the scale seems to report a valid indication of a degree of stage fright for that individual. Although the Bow and Rhodes are more directly concerned with personality adjustment rather than general anxiety or self-confidence as a factor in the speaking situation with relation to speaking success.

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[52] Dickenson et al., p. 521.

[53] Clevenger and King, op. cit. (above, note 49), p. 296.

[54] E. C. Chenoweth, "The Adjustment of College Freshmen to the Speaking Situation," *Quarterly Journal of Speech*, XXVI (December, 1940), p. 585.

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[55] H. Gilkinson, "Social Fears as Reported by Students in College Speech Classes," Speech Monographs, IX (1942), 141-160.

[56] G.M. Low and B. Sheets, "Relationship of Psychometric Factors to Stage Fright," Speech Monographs, XVIII (November, 1951), 266-271.

[57] [illegible] Ross and W.F. Osborne, "Survey of Emotions in Stage Fright," (Unpublished research material, Wayne State University, 1952)

[58] Examples of Questions from Questionnaires:

a. [illegible] personality inventory which measures introversion-extroversion and dominance-submission personality traits.
b. Gilkinson's [illegible] (PRCS), asks such questions as, [illegible] "I feel tense while speaking", "I [illegible] while I speak".
c. Low and Sheets gave a student a battery of tests. For example, an English test, [illegible] test, [illegible] test, psychological test [illegible], a questionnaire for biographic material and a speech [illegible] similar to Gilkinson.
d. Ross and Osborne ask questions similar to Gilkinson, and analyzed their [illegible].

In measuring body responses to a speaking situation, researchers have used the Palmer Sweat Index, the sphygmomanometer, and the stethoscope. Dean was able to measure with the Palmer Sweat Index the stress inherent in the speaking situation by utilizing subjects who were to give an oral report and subjects who were to appear in a play. Dean found that there was a significant increase in the Palmer Sweat Index of these subjects in the speaking situation.[59] Using the concept that what measures defines, Dean then defines stage fright in terms of an increase or decrease in the Palmer Sweat Index in the actual stress situation.[60] Dickens and Parker, by using a sphygmomanometer and stethoscope to [illegible] the blood pressure and pulse-rate change, found that over 90 per cent of the subjects tested were measurably affected by the speaking situation.[61] These reports on body phenomena suggest that certain body changes do occur in speaking and indicate a measure of stress.

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[59] Dean, p. 543-551.

[60] *Ibid.*, p. [illegible]

The method of using judges to determine speech fright can be varied in many ways. As Clevenger and King observed it, speech fright may be observed by either focusing attention upon the fidgetiness of the body, the inhibition of the body, or the autonomic of the body.[62] Many judges use a form of rating scale in observing these overt manifestations of stage fright in their subjects.

Dickens et al. found that the judges' rating-scale technique was reliable in measuring overt manifestations of stage fright.[63] In another study, Dickens et al. found that

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[61] Milton Dickens and W. R. Parker, "An Experimental Study of Certain Physiological, Introspective and Rating-Scale Techniques for the Measurement of Stage Fright," _Speech Monographs_, XVIII (November, 1951) p. 251-259.

[62] Clevenger, _op. cit._ (above, note 45), p. 203.

[63] Milton Dickens, Francis Gibson and Caleb Prall, "An Experimental Study of the Overt Manifestations of Stage Fright," _Speech Monographs_, XVII (March, 1950), p. 37-47.

[illegible] rarily, the [illegible], [illegible] and the physiological measures produced higher correlations with each other than either of them did with the private ratings of the subjects by [illegible], using the Gilkinson PRCS.[64]

Another method not categorized is illustrated in the following experiment by Paivio and Lambert,[65] who attempted to measure anxiety within a creative story. The subjects were told to write an original story. Some were told that they would tell their story after their writing of it, while others were told that they would be listeners. These authors postulated that those subjects who were told that they would act as speakers would have more anxiety than those who were told they would be listeners. They expected this anxiety (stage fright) to be projected within the creative story. Their findings were not significant, except to indicate that women feel more anxiety than do men in the speaking situation.

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[64] Milton Dickens and William Parker, "An Experimental Study of Certain Physiological, Introspective and Rating-Scale Techniques for the Measurement of Stage Fright," *Speech Monographs*, XVIII (November, 1951), p. 251-259.

[65] Paivio and Lambert, p. 1.

C. Relationships between Stage Fright and General Anxiety, Self-confidence, Socio-economic Status, Intelligence, Creativity, Speaking Experience

There have been several observations made by researchers which tend to link certain phenomena with stage fright. The literature indicates that there is a positive relationship between general anxiety, self-confidence, and speech fright: ". . . we also believe that a person's lack of confidence in himself may lead to that behavior we call stage fright."[66] Dickens also finds that a significant relationship exists between general anxiety and stage fright; ". . . that worry and stage fright occur together. . . ."[67] In doing research with children, Dickens also reports that there is a positive correlation between lower socio-economic levels and stage fright. He says, ". . . boys from the lower socio-economic levels are, more susceptible to stage fright than the boys from the upper socio-economic levels."[68] Dickens indicates that it is the brighter child who feels more general anxiety than the duller one. This accounts for his reported absence of the significant relationship between stage fright and

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[66] Robinson et al., p. 321.

[67] Dickens et al., p. 40.

[68] *Ibid.*, p. 41.

[illegible] ability, was at the elementary school level.[69] [illegible], from his studies, finds that a positive relationship exists between creativity and high ability.[70] Since we have found that positive correlations exist between stage fright and general ability, and intelligence, it seems possible that the more intelligent, creative child might be the one to have more speaking anxiety. This writer could find no experimental studies to further prove or disprove this possibility.

Speaking experience and social experience or social adjustment seem to have a significant bearing upon the speaker's stage fright. Low and Sheets reflect the relationship which exists between them. They indicate that those who had the least speaking experience were those who had the most speech fright.[71] Haley's investigation finds the same phenomenon.[72] And Lomas and Gilkinson indicate that ". . . responses to the Bell Adjustment Inventory at other

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[69] *Ibid.*, p. 37.

[70] *Ibid.*, pp. [illegible].

[71] Low and Sheets, *op. cit.*

[72] [illegible] D. Haley, "An Analysis of the [illegible] the Level of [illegible] Conditions of [illegible], and [illegible]," *[illegible]* ([illegible] 1964), p. [illegible].

[illegible] of speech situations.[72] Thus, this research would suggest that speech fluency may be [illegible] as a 'situational phenomenon.' [illegible] in their study of [illegible] than at the beginning.[73] Thus, it would seem that speech [illegible] can have a positive effect upon a stutterer's [illegible] behavior; and, to [illegible] degree, discounting the [illegible] seems to be [illegible].[74]

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[72] [illegible]

[73] [illegible], op. cit., passim, [illegible]

[74] [illegible]

F. Controversy Concerning the Most Effective Way to Combat Speech Fright

Under the section entitled, "Methods of Controlling Speech Fright," the various approaches were listed. These could be, by and large, classified as direct approaches to the problem in that they treat stage fright directly in terms of adequate preparation, planned purposeful action, relaxation, and positive conditioning through many given opportunities for gaining speech experience. There is, however, another way to approach the problem; and that would be by an indirect method involving play therapy, psychotherapy, and so forth. These methods are effected to alleviate the disturbance as well as the symptom. This indirect approach assumes that perhaps there exists an emotional conflict which causes the stage fright. Thus, the stage fright would not be alleviated by a direct method. Sarason notes the Freudian point of view that, behind a "stage fright" or such a phobia, there is a more deeply seated fear. For example, the child who is terrified to speak in front of others may be covering up the real fear of castration.

Therefore, to treat the underlying phobia, rather than the apparent speech fright which acts as camouflage, would be to these psychologists more effective.[76] Axline, in her work with children, suggests that, by working with the general anxiety first, speech fright might be reduced. "Speech problems, too, seem to be linked with the emotional life of the child."[77] Murray would have the speech teacher not only stress skills, but also, in some cases primarily, further the student's personality in terms of loosening his egocentric self and strengthening his altruistic self. He thinks of this more as a social process per se than a way of merely overcoming speech fright; nevertheless, this idea of personality development is a way that Murray indirectly would deal with speech fright. Murray states,

> Invariably the speech tools will be found contributing to whatever degree of maladjustments which exist. . . . [However, Murray suggests that the teacher]. . . may [have to] go back to the wellsprings of personality development, the degree to which the person has been unable to outgrow the constrictions and inhibitions of childhood egocentricity which distort and color all his perspectives and maintain self on the throne.[78]

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[76] Saranson et al., pp. 48-66.

[77] M. A. Axline, *Play Therapy* (New York, 1947), p. 61.

[78] Elwood Murray, "Speech Standards and Social Integration," *The Quarterly Journal of Speech*, XXVI (February, 1940), 76-77.

Knowledge of each individual subject would perhaps eliminate any great controversy by helping to pinpoint causes and thus indicate which approach or combination of approaches might create the greatest effectiveness in reducing unwanted stage fright behavior.

g. Anxiety: Does it Hamper or Stimulate?

There are no empirical or experimental studies in the field of speech regarding which speaking situations affect certain individuals more, and whether or not certain individuals find a certain intensity of anxiety stimulating in terms of directing them toward greater effort within the speaking situation. Perhaps some speaking situations may create greater stress for almost all speakers. Dickens and Parker do indicate that the speaking situation affects anxiety in terms of intensity.[79]

All the studies in physiological measurements of speakers and stage fright indicate that a certain amount of physical tension is normal and always present until the speech gets under way. Bean[80] and Dickens and Parker[81] measured physiological reactions and report that they apparently are a normal response to the situation. Since this is true, in reporting feelings of stage fright and in observing stage fright phenomena, the degree of tension must be evaluated since even a normal response involves tension. Eisenson warns that "Actual stage fright, of course, should not be confused with a degree of heightened feeling appropriate to any public performance."[82] Thus, stage fright might be distinguished in the above instance only in the degree of the intensity felt. Once this tension has been evaluated as being within the realm of stage fright, however, Knisely makes a very important distinction. He states that there may be at least two types of stage fright, and that these two types differ more in kind than in degree. He describes these types as follows:

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[79] Dickens and Parker, op. cit., (above, note 61).

> 1. Normal stage fright, a customary response to a new and complex social situation, which decreases during a series of successful speaking experiences.

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[80] Bean, pp. 543-551.

[81] Dickens and Parker, pp. 251-259.

[82] Eisenson et al., p. 325.

> 2. Abnormal stage fright, an atypical response to the speaking situation, which does not change during a series of successful speaking experiences.[83]

The reports of the above studies indicate that perhaps anxiety does not hamper speaking in all instances. Knisely's study comes closest to answering the question concerning constriction and stimulation in this phenomenon of speech fright. He used a descriptive method, and he obtained information in lengthy interviews with sixty subjects who were considered to be prominent contemporary public speakers.[84] He found:

> 1. . . .that stage fright is not universal, nor was it inevitable in the speaking situation.
> 2. Stage fright or even nervous tension was not essential for a successful speaking performance. Neither was present in the majority of current speaking performances.
> 3. The average speaker did have stage fright in at least a part of his speaking activity, but reactions were mild. . .and infrequent.

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[83] W. A. Knisely, "On investigation of the Phenomenon of Stage Fright in Certain Prominent Speakers," Speech Monographs XVIII (June, 1951), p. 124 (abstract).

[84] *Ibid*. p. 124.

> 4. . . .there was some indication that speakers with most current stage fright had had more formal speech training, and that subjects with the least past stage fright had had more early speaking activities.
>
> 5. The majority reported that their stage fright diminished or disappeared within less than a year after beginning a regular speaking schedule.[85]

In concluding this section, it might be said that anxiety reactions in a speaking situation can take two different routes. As Sarason and Mandler report, "The anxiety drive of the higher anxiety group tended to improve performance."[86] or, as Bean indicates on the other hand, ". . . anxiety (could) intensify and thereby interfere with performance."[87]

h. Speech Fright and Elementary School Education

The literature shows that there has not been any empirical or experimentally oriented research concerning the education of elementary school children to reduce stage fright and anxiety. E. A. Haggard states: "Our findings indicate that the best way to produce clear thinkers is to help children develop into anxiety-free . . .individuals . . .who are also trained to master a variety of intellectual tasks."[88] This researcher had the opportunity, when participating in a speech program at the Englewood Public Schools in Colorado, to teach speech improvement in classes from kindergarten through grade 12. It seemed, through casual observation, that at about the 5th or 6th grade, symptoms of speech fright began to appear in the instructor and, subsequently, more speech fright was observable and reported with each succeeding grade. At times, the speech fright acted as a stimulating factor, and at other times it did not.

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[85] _Ibid_., p. 125.

[86] G. Mandler and S. B. Sarason, "A Study of Anxiety and Learning," _Journal of Abnormal Social Psychology_, XXXXVII (April, 1952), p. 174.

[87] Bean, p. 550.

From this researcher's own introspective experience, and from Knisely's introspective study, it is implied that speech fright for the individual is not a constant phenomenon but varies in intensity and in kind with the individual.

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[88] Sarason et al., op. cit., (above, note 12), p. 80.

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1) Hahn[89] analyzes the speech of 1st graders in terms of language. She indicates that, "sentence structure depends more extensively on the immediate situation in which (the child) speaks and the topic about which he talks than is realized." In other words, she is indicating that there are more determinants than merely maturation of the child which influence sentence structure in terms of length and complexity. Her intent was not to investigate the elementary grades in order to make a comparison between them in terms of speech ability. She uses the term speech proficiency primarily to mean spoken language ability.

2) Dorothy Higgenbotham[90] did a study of kindergarten, 1st, and 2nd grade children in audience situations, paying particular attention to maturation and learning

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[89] Elise Hahn, "An Analysis of the Content and Form of the Speech of First Grade Children," Quarterly Journal of Speech, XXXIV (October, 1948), 361-366.

[90] Dorothy C. Higgenbotham, "A Study of Kindergarten, First, and Second Grade Children in Audience Situations, with Particular Attention to Maturation and Learning as Evidenced in Content, Form, and Delivery," Speech Monographs, (abstract 1962), p. 91.

as evidenced in content, form, and delivery. She also uses the term speech proficiency to mean primarily language proficiency. Two important findings are: "that the amount of language employed in this situation and the length of sentences increased with age." and "that language ability was influenced negatively by each addition of a sibling."

b. The Problem of Evaluating Speech Ability

Relevant to this study is the question as to whether or not speaking ability can be realistically assessed. Thompson indicates that, although speech evaluation cannot be totally free of human bias, nonetheless, a trained speech teacher can indicate a relative and comparatively valid index of the speaker's skills.[91] Although Carp, in his study, indicates that six judges would seem to be a minimum requirement in obtaining true judgment of an individual's speech ability, nevertheless, he agrees with Pennington. He quotes

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[91] Wayne Thompson, "Is There a Yardstick for Measuring Speaking Skills?" Quarterly Journal of Speech, XXIX (February, 1943), p. 87-91.

[92] Bernard Carp, A Study of the Influence of Certain Personal Factors on a Speech Judgment (New Rochelle, 1945), p. 58.

Pennington as saying, "Judges are reliable when rating general qualities of speech. They are consistent both with themselves and with each other. . . ."[92] Fotheringham states that a judge can reduce error by considering the crucial factors of speech effectiveness. One would be that the rater ought to be aware of his possible resentment to the speaker; another would be the rater's tendency to generalize from a few aspects of speech behavior about the total speech; and the last would be an ordered way of scoring this behavior.[93]

Knower cites: "the mean average deviation in judging speech performances in contest speaking is slightly over one rank position."[94] This indicates a greater discrepancy among speech critics. Gauger states: "that the expert group is really more critical in judging these elements

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[92] Bernard Carp, A Study of the Influence of Certain Personal Factors on s Speech Judgment (New Rochelle, 1945), p. 58.

[93] Wallace C. Fotheringham, "A Technique for Measuring Speech Effectiveness in Public Speaking Classes," Speech Monographs, XXIII (March, 1956), pp. 31-37.

[94] Franklin Knower, "A Study of Rank Order: Methods of Evaluating Performances in Speech Contests," Journal of Applied Psychology, XXIV (October, 1940), pp. 633-644.

(speech ability) than the 9th graders . . . or the advanced speech students. . . ."[95]

Therefore, it would appear that those properly trained to evaluate speech-making can do so objectively.

c. Relationship of poor speech ability and various adjustment tests: Knower and Gilkinson could not find any significant relationship between the poor speakers in their study of beginning college students and the various adjustment tests which were used.[96]

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[95] Paul Gauger, "A Comparison of the Ability of High School Speech Students and Speech Experts in Rating a Speech Performance," Journal of Educational Research, XXXXII (November, 1948), p. 217.

[96] Howard Gilkinson and F. Knower, "A Study of Standardized Personality Tests and Skill in Speech," Journal of Educational Psychology, XXXII (March, 1941), 161-175.

CHAPTER II

Pilot Study and Procedures

- A. Purpose of Pilot Study
- B. Development and Regularization of the Measurements Adaptable to the Various Grades
    - 1. The Tests
        - a. Ross Test
        - b. Sally Test
        - c. Direct Questioning (Car Test)
        - d. Indirect Questioning (Puppet Test)
    - 2. Comparisons of Observations to the Various Tests
        - a. Ross Test
        - b. Sally Test
        - c. Direct Questioning (Car Test)
        - d. Indirect Questioning (Puppet Test)
    - 3. Comparisons Between the Various Tests
        - a. Ross Test Correlated with Direct Questioning
        - b. Ross Test Correlated with Indirect Questioning
        - c. Sally Test Correlated with Direct Questioning
        - d. Sally Test Correlated with Indirect Questioning

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        e. Direct Questioning Correlated with Indirect Questioning

    4. Conclusions Regarding Tests of Speech Fright

C. Efficacy of a Structured Speech

D. A Comparison Between the Grade Levels in Terms of Speech Ability

E. A Comparison Between the Grade Levels in Terms of Speech Anxiety

F. A Comparison of Speech Fright and Speech Ability Between the Observer's Ratings and the Classroom Teacher's Ratings

G. Evaluating the Communicativeness of a Short Questionnaire to be Filled Out by the Teachers of the Classes Involved in the Study

H. Differences in Speech Anxiety Between the Grades

I. Major Conclusions of Pilot Study

CHAPTER II

Pilot Study and Procedures

The general purpose of this pilot study was to refine methodology and techniques so that the main study of this dissertation could be carried out.

A. Specific Purpose of Pilot Study

The specific purpose of this pilot study was: (a) to train two reliable observers, (b) to develop and regularize tests adaptable to the various grades, (c) to test the efficacy of a structured speech, (d) to indicate a rough comparison of speech ability and speech fright between grade levels, and (e) to evaluate the language of a short questionnaire which was filled out by the teachers. The sample for the pilot study was drawn from the first, third, and sixth grades of three parochial schools in Detroit. A Total of 45 students were involved.[97]

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[97] The Detroit Catholic schools involved in this study were:
(1) St. Louis The King, 18805 St. Louis, Detroit, Michigan
(2) Blessed Sacrement Cathedral School., 82 Belmont, Detroit Michigan
(3) Our Lady Queen of Heaven, 8210 Royat, Detroit, Michigan

Voice, language, bodily action, and organizational ability were used as criteria of a child's speech ability; and the children were rated in terms of these four items. Observed behavior was used as the indicator of speech fright in terms of the quality of over-control or under-control shown by the children. Methodology was refined, and measures of reliability between the observers were determined.

In order for the two observers to refine their rating procedures, the children in the classrooms were asked to go to the front of the class individually. They were each given a piece of clay and asked to explain what they were doing with the clay. They were permitted to do what they wished with the clay. The two observers independently rated each child on a five-point rating scale. (See Appendix) A score of 1 indicated high or skilled ability, and a score of 5 indicated poor or inadequate ability. With respect to speech fright, a score of 1 indicated scarcely any signs of speech fright; and a score of 5 indicated a great many signs present which might point to speech fright.

With a population of 15 first-graders, 15 third-graders, and 15 sixth-graders, the correlation coefficient between the observers in terms of speech ability was $r = .837$, which is significant at the 1 per cent level of confidence. The correlation between the observers in terms of speech fright was $r = .733$, which was significant at the 1 per cent level of confidence.

B. Development and Regularization of the Measurements Adaptable to the Various Grades

In order to develop and regularize other measurements of speech fright adaptable to the various grades, several tests and devices through which the children could indicate their speech fright were devised. Practice was especially necessary for developing clear and appropriate language. Four measures for the evaluation of speech fright were developed or adapted for this study: (1) Ross Test, (2) Sally Test, (3) Direct Questioning (Car Test), and (4) Indirect Questioning (Puppet Test). The first two tests (the Ross Test and the Sally Test) were paper-and-pencil, self-administered tests; their purpose was to ascertain introspectively the child's degree of felt speech fright. The other two tests (the Direct Questioning or Car Test and the Indirect Questioning or Puppet Test) were also used to ascertain the child's degree of felt speech fright introspectively; however, they were administered privately and individually.

1. The Tests

a. Ross Test

This test was a modification of the Ross-Osborne Test, which is a self-administered, paper-and-pencil speech anxiety test devised for use with college students.[98] It was modified several times in terms of vocabulary and sentence structure before it was applied to the fifth- and sixth-graders. The Ross-Osborne Test asks the adult to indicate what symptoms of speech fright are most extraordinarily felt. (See Appendix) This test was adapted for use with fifth- and sixth-graders by a process of asking the children to read the questions aloud and then questioning them about what they had read. Sometimes the children were questioned privately and individually about their comprehension of the questions on the test. Each modification was then tested out for comprehension in other classes in this same manner. When the vocabulary and sentence structure were finally understood by children at this level, the modified version of the test was accepted and subsequently named the Ross Test. (See Appendix)

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[98] R. S. Ross and W. J. Osborne, "Survey of Incidence of Stage Fright," (Unpublished Research Material, Wayne State University, 1961).

b. Sally Test

In order to make the concepts and directions understandable for younger children, from kindergarten through the fourth grade where reading proficiency is a variable, several relatively language-free tests were created. Comprehensibility was established in two ways: (1) by directly asking the children if they understood what was required of them, and (2) by inference from the higher range of diversity with other tests, especially in the lower grades. The observers found that, with some tests and some sets of directions, the children all gave the same answer in the early grades; and, from this, inferences of test clarity were made. (See Appendix) The test which was chosen was called the Sally Test. It was a test with five faces drawn on a sheet of paper. The faces ranged in expression from a very happy face to a very sad one. The children were asked to color the face which best represented them when they spoke in front of the class. Each child had a paper of his own to color.

c. Direct Questioning (Car Test)

A small toy car was placed on a colored racetrack so as to approximate in an analogical way how much relative speech fright a child felt when he rose to speak. The child was told that the farther he moved the car along the track, the more uneasy and anxious he felt when he was asked to speak in class. The farther the child moved the car, the greater the speech fright of the child. The track was divided into five distinct sections: blue, green, yellow, orange, and red, so that a five-point rating could be given for the child's response. Blue was the color nearest the starting position of the car; and a stop on blue indicated the least amount of stage fright, whereas a stop on red at the farthest end of the track indicated the most speech fright. Each child was tested individually in a private session with an observer. This direct questioning appeared readily understandable to all of the children in the pilot study. (See Appendix) This procedure was subsequently modified by asking the child to supply the word.

d. Indirect Questioning (Puppet Test)

One projective test of speech fright was created which utilized puppets. A child was asked individually, in a private session, to tell how much simulated speech fright a puppet felt as it spoke to a group of three other puppets which were set up to represent a class of children. The child could indicate an amount of stage fright by again moving the car on the racetrack, thus giving the response a five-point rating. This procedure was subsequently modified in the main study by asking the child to supply the word as to how the puppet felt.

2. Comparisons of Observations to the Various Tests

a. Ross Test

A sixth-grade class was given this paper-and-pencil test of 22 questions which asked for a yes or no answer to certain possible extraordinary symptoms of speech fright. If the child wrote between one and three yes answers, this was equivalent to the one on the one-to-five-point rating scale, indicating little if any speech fright. A score of four to six yes answers was equivalent to a two rating. A score of seven to nine was equivalent to a three rating. A score of ten to twelve, equivalent to a four rating; and a score of thirteen to twenty-two was equivalent to a five rating and indicated a high speech fright level.

In a sample population of 15 at the sixth-grade level, the correlation coefficient between the observers and the Ross Test was r = .15, which is not significant.

b. Sally Test

In a sample population of 15 at the first-grade level, the correlation coefficient between the observers of speech fright and the Sally Test was r = .08, which is not significant.

With a third-grade sample population of 15, the correlation between the observers and the Sally Test was r = .36 which, though positive, is not significant.

c. Direct Questioning (Car Test)

In a sample population of 15 at the first-grade level, the correlation coefficient between the observers and the Car Test was r = .16, which is not significant.

In a sample population of 15 at the third-grade level, the correlation coefficient between the observers and the Car Test was r = .08, which is not significant.

In a sample population of 15 at the sixth-grade level, the correlation coefficient between the observers and the Car Test was r = .39 which, though positive, is not significant.

d. Indirect Questioning (Puppet Test)

In a sample population of 15 at the first-grade level, the correlation coefficient between the observers and the Puppet Test was r = .1, which is not significant.

In a sample population of 15 at the third-grade level, the correlation coefficient between the observers and the Puppet Test was r = -.57, which is a negative correlation significant at the 5 per cent level of confidence.

In a sample population of 15 at the sixth-grade level, the correlation coefficient between the observers and the Puppet Test was r = .12, which is not significant.

3. Comparisons Between the Various Tests

a. Ross Test Correlated with Direct Questioning (Car Test)

In a sample population of 15 sixth-grade children, the correlation coefficient between the Ross Test and the Direct Questioning (Car Test) was r = .644, which was significant at the 1 per cent level of confidence.

b. Ross Test Correlated with Indirect Questioning (Puppet Test)

In a sample population of 15 sixth-grade children, the correlation coefficient between the Indirect Questioning (Puppet Test) and the Ross Test was r = .628, which is significant at the 1 per cent level of confidence.

c. Sally Test Correlated with Direct Questioning (Car Test)

In a sample population of 15 first-grade children, the correlation coefficient between the Direct Questioning (Car Test) and the Sally Test was r = .49, which is not significant.

In a sample population of 15 third-grade children, the correlation coefficient between the Direct Questioning (Car Test) and the Sally Test was r = .328, which is not significant.

d. Sally Test Correlated with Indirect Questioning (Puppet Test)

In a sample population of 15 first-grade children, the correlation coefficient between the Indirect Questioning (Puppet Test) and the Sally Test was r = -.109, which is not significant.

In a sample population of 15 third-grade children, the correlation coefficient between the Indirect Questioning

(Puppet Test) and the Sally Test was r = .140, which is not significant.

e. Direct Questioning (Car Test) Correlated with Indirect Questioning (Puppet Test)

In a sample population of 15 first-grade children, the correlation coefficient between the Indirect Questioning (Puppet Test) and the Direct Questioning (Car Test) was r = .342, which is not significant.

In a sample population of 15 third-grade children, the correlation coefficient between the Indirect Questioning (Puppet Test) and the Direct Questioning (Car Test) was r = .168, which is not significant.

In a sample population of 15 sixth-grade children, the correlation coefficient between the Indirect Questioning (Puppet Test) and the Direct Questioning (Car Test) was r = .628, which was significant at the 1 per cent level of confidence.

4. Conclusions Regarding Tests of Speech Fright

a. The pilot study tends to support the literature and previous research in that the observations of speech fright made by the observers, for the most part, did not correlate with any of the introspective tests of speech fright.

b. There was a significant negative correlation between the Indirect Questioning (Puppet Test) and the observers' observations of speech fright for the third grade class. Perhaps the child projects his wished-for feelings upon the puppets rather than his actual feelings. It might also be that the child at this age level has a greater need to please the observer.

c. The introspective tests tend toward a degree of correlation with each other. The introspective tests seem less correlated with the observers' observations. This brings out the possibility, as discussed in the literature, that the observers' observations and the introspective tests are measuring different phenomena (both of which may be of interest to this study).

d. At the sixth-grade level, the Ross Test, the Direct Questioning (Car Test), and the Indirect Questioning (Puppet Test) are significantly correlated. This may indicate that older children are more consistent in their responses to introspective tests.

e. At the third-grade level, the introspective tests [the Sally Test, the Direct Questioning (Car Test), and the Indirect Questioning (Puppet Test)] are the least correlated. It may be that, as was stated in conclusion 2, third-grade children are less able to assess their own feelings or are, at this age, most anxious to give a pleasing answer when facing an examiner in a private session. Since the Sally Test is not privately administered, the child might not be as afraid to admit his true feelings in this impersonal situation.

f. Since there was a higher correlation among the introspective measurements at the sixth-grade level, which was significant at the 1 per cent confidence level, it may be inferred that these introspective measurements have a greater validity in terms of consistently testing the same speech fright phenomena with older children.

C. Efficacy of a Structured Speech

Another part of the pilot study was carried out to indicate the relative effectiveness of the structured speech within the classroom in terms of its being a typical or representational kind of speech. There are two ways to observe the speech-making of elementary school children. One is to watch carefully each child's many different speaking occurrences and to draw a general picture of the child's speech-making ability from these observations. The other is to choose a prescribed speaking sample of one or two minutes and then have two trained observers systematically rate the child on ability. The short structured speech situation was used in evaluating each child. It was desirable that this structured speech present the observers with a reasonable facsimile of a child's actual speech-making in order that it not give a distorted or false picture. The structured situation was devised, therefore, to bring together into one short speech the possibilities for both the formal and the impromptu aspects of actual speech-making. The speech utilized a piece of clay as its topic. In this speech, each child was asked to take a piece of clay in his hands in front of the class and to explain what he was doing.

Because this "clay" speech had both formal and impromptu aspects, it was hypothesized that it might be reasonably predictive of the child's actual classroom speech ability and anxiety. The pilot study was devised in part to test this predication by comparing the structured speech to the real classroom speeches of the same children.

The observer entered the classroom, was introduced to the children, and took a seat at the back of the room. For a period of one half hour he observed the children in a usual classroom speech situation such as show and tell, reading aloud, curriculum participation, and discussions. The children were observed for speech fright, using the same criteria and rating scale that were devised for use with the structured clay speech. Later, these same children were asked by another observer to participate in the structured clay speech. They were rated again as to speech fright and speech ability.

In a sample population of 22 children from the first grade, third grade, and sixth grade, the correlation coefficient between the observed speech anxiety in the structured clay speech and the observed speech anxiety in the actual classroom speech situation was $r = .745$, which is significant at the 1 per cent level of confidence.

It was concluded from the pilot study, therefore, that the structured speech is representational for the phenomenon of speech fright and has utility in predicting the child's level of speech fright as observed.

D. A Comparison Between the Grade Levels in Terms of Speech Ability

In order to obtain a comparison of speech ability at the different grade levels, the rating scale of five points which was developed for the observed clay speech was used. Since speech ability was broken down into four areas, voice, language, action, and thought, these four areas were then compared at the three grade levels. A mean score for each category was obtained for comparison at each grade level. The scores for each grade level were charted on a histogram for further comparison. (See Appendix for pilot histograms of speech ability.) The scores obtained were used to find a standard deviation from the mean score at each grade level, and these standard deviation scores were also compared. (See Appendix for chart of standard deviations.)

The mean score for the thought dimension in the first grade was 3.0; for the third grade, it was 2.8; and for the sixth grade, it was 2.0.

The mean score for language in the first grade was 2.7; for the third grade, it was 2.6; and for the sixth grade, it was 2.2.

The mean score for action in the first grade was 2.8; for the third grade, it was 2.8; and for the sixth grade, it was 2.8.

The mean score for voice in the first grade was 2.4; for the third grade, it was 2.6; and for the sixth grade, it was 2.6.

The histograms indicate that the first-grade scores in all categories had a wider range.

The histogram of voice shows that this proficiency is slightly greater at the first-grade level than at the third-grade level, and the third-grade proficiency was slightly greater than at the sixth-grade level. The mean first-grade score was also slightly higher.

The histogram of language shows that proficiency at the sixth-grade level was slightly greater than at the third-grade level, and that the third-grade language proficiency was slightly greater than that of the first grade. This is supported by a comparison of the mean scores of language.

The histogram of action shows the greatest proficiency at the first-grade level, with decreasing proficiency in the third grade, and even further decrease in action proficiency at the sixth-grade level. This decrease is not reflected in the mean scores at each grade level.

The histogram of thought shows the greatest thought proficiency at the sixth-grade level, with a lesser degree of thought proficiency at the third-grade level. The least amount of thought proficiency is at the first-grade level. This is supported by the comparison of the mean scores of thought proficiency at the three grade levels.

The standard deviation of voice in the first grade was .892; for the third grade, it was .553; and for the sixth grade, it was .591.

The standard deviation of language proficiency in the first grade was .892; for the third grade, it was .522; and for the sixth grade, it was .573.

The standard deviation of action proficiency in the first grade was 1.244; for the third grade, it was .4989;

and for the sixth grade, it was .562.

The standard deviation of thought proficiency in the first grade was 1.047; in the third grade, it was .746; and for the sixth grade, it was .695.

It was concluded that:

1. Generally speaking, language seems to improve as a child matures in age and progresses in grade level.

2. Thought proficiency seems to improve with age and with advancing grade levels.

3. Voice proficiency seems to decrease slightly as age increases and as grade level increases. Perhaps increased anxiety in a structured situation could account for this slight drop.

4. Action proficiency seems to decrease for many children as they become older. Perhaps more inhibitions concerning bodily actions develop as the child matures, or perhaps the children are taught by the teacher to move less, and thus become conditioned.

5. As the children's ages increased, they tended to have scores which grouped more closely together, and they seemed to be more homogenous. Perhaps the extreme examples scored at the first-grade level had been modified by extra teacher attention to their problems.

6. At the first-grade level, the thought proficiency and action proficiency standard deviations showed the group to be more heterogeneous on these two items. Thought proficiency remains the area in which the scores are consistently more heterogeneous, even at the third- and sixth-grade levels, although they are more homogenous than they were in the first grade.

7. In language proficiency, action proficiency, and voice proficiency, the standard deviations indicate a slight tendency to be more homogenous at the third-grade level than at the sixth-grade level. Perhaps this age group tends to be one at which these kinds of scores would be the most homogenous. Extreme problems have been given teacher help, and native

abilities have not yet been developed to any extent.

E. A Comparison Between the Grade Levels in Terms of Speech Anxiety

In order to compare anxiety at the different grade levels, the mean scores of the children on the various tests of anxiety were compared at each grade level. Histograms were made to show the comparison of anxiety in terms of numbers of children at each point on the five-point rating scale. (See histograms of anxiety and chart of mean anxiety scores in Appendix.) The standard deviation of anxiety scores for each measure of anxiety was tabulated at each grade level for further comparison.

The mean score for Direct Questioning (Car Test) of anxiety for the first grade was 2.5; for the third grade, it was 2.7; and for the sixth grade, it was 3.7.

The mean score for Indirect Questioning (Puppet Test) of speech fright for the first grade was 2.7; for the third grade, it was 2.5; and for the sixth grade it was 3.3.

The mean score for the Sally Test at the first- and third-grade levels, and for the Ross Test of anxiety at the sixth-grade level, was 1.9 at the first-grade level; for the third grade, it was 1.7; and for the sixth grade, it was 3.3.

The mean score for observed anxiety on the judgments of the clay speech was 2.8 for the first grade, 3.2 for the third grade, and 3.4 for the sixth grade.

The histogram shows that a larger number of children report less anxiety on the Sally Test than in the other tests for anxiety. A greater number of children report anxiety on all tests at the sixth-grade level than do children at the first- or third-grade levels.

There seems to be a greater number of children at the third- and sixth-grade levels who are observed to be anxious. This is supported by the larger class mean score on observation at these levels.

A larger number of children at the third-grade level report less anxiety on both the Sally Test and the Indirect Questioning (Puppet Test) than at any other level. Third grade children indicate a little more speech fright through the Direct Questioning (Car Test).

At the first-grade level, the standard deviations for all of the tests on anxiety are the largest.

A comparison of the standard deviations of all of the anxiety tests at the third-grade level shows that they vary the most at this level from test to test, whereas the first grade test deviations are all high, and the sixth grade deviations are all low, with the exception of one.

At the sixth-grade level, the standard deviation on the Ross Anxiety Test is higher than any of the other standard deviations for any test at any age level. It is higher than that recorded for the Sally Test at the first- and third-grade level.

It was concluded that:

1. Children have more anxiety about speech-making as they grow older, perhaps due to conditioning or fear of doing poorly.

2. Children at the sixth-grade level report more anxiety on the introspective tests and are more consistent with other tests of speech fright.

3. Children at the third-grade level seem to be

ambivalent in their reporting of anxiety in the introspective tests. While a greater number of them have observed anxiety than do children at the first-grade level, they sometimes report even less anxiety than those in the first grade. Perhaps this is due to a wish to hide their feelings from themselves, from others, or from both. They are less consistent with other measurements of speech fright.

4. A great number of children reported less anxiety on the Sally Test than on any other test. Perhaps they liked the smiling faces or were loathe to show an unhappy visual image of themselves, since this is the only completely visual test given to measure introspective feelings.

5. The standard deviation scores seem to emphasize the ambivalence of the third grade with fluctuations in deviation from test to test.

6. The first-grade children seem to be the most heterogeneous group; they vary more widely in their answers to questions.

7. The sixth-grade class showed the greatest deviation from the mean in the Ross Anxiety Test. Since this one score seemed so out of line with all of the other scores given, it may be a reflection of very poor reading ability on the part of some of the children; this was the only test given to children in which reading was requested. The histogram would tend to support this inference.

F. A Comparison of Speech Fright and Speech Ability Between the Observer's Ratings and the Classroom Teacher's Ratings

A first- and a third-grade teacher were each asked to rate the children within their respective classes in terms of speech ability and speech anxiety on the five-point rating scale. (See Appendix for an example of this rating scale.) The children's speech ability was rated in terms of voice, language, action, and thought (organizational skill). The children's speech fright was rated in terms of bodily behavior on a five-point rating scale. The teachers' scores were correlated with the mean scores of the observers' ratings of each of these children.

The correlation coefficient between the first grade teacher and the observers' ratings of speech ability in a population of 15 first-graders was r = .73, which is significant at the 1 per cent level of confidence.

The correlation coefficient between the first grade teacher and the observers' ratings of speech anxiety in a population of 15 was r = .54, which is significant at the 5 per cent level of confidence.

The correlation coefficient between the third grade teacher and the observers' ratings of speech ability in a population of 15 was r = .25, which is not significant.

The correlation coefficient between the third grade teacher and the observers' ratings of speech anxiety in a population of 15 was r = -.001, which is not significant.

It was concluded that:

1. Since this was a very small sample of teachers for rating, it is doubtful whether any conclusions of significance can be drawn. One of the teacher's ratings correlated with the observers' ratings, and one did not. Whether this one teacher was more

perceptive, more attuned to the observers' rating system, or whether it is easier to predict speech anxiety and ability at the first-grade level than at the third-grade level, are factors which are not known and would have to be explored further.

2. Both teachers seemed better able to predict speech ability than speech anxiety and had higher appropriate correlations with the observers.

G. Evaluating the Communicativeness of a Short Questionnaire to be Filled out by the Teachers of the Classes Involved in the Study

The first, third, and sixth grade teachers whose pupils were involved in a part of this pilot study were given a short questionnaire. (See Appendix) The following questions were asked:

1. What does it mean to you when you say that a child should have good speech?
2. What does it mean to you when you say that a child has speech fright?
3. In relation to your specific class:
    a) Should speech be taught as a separate subject or as part and parcel of all other subjects?

b) Should we call attention to the way a child speaks? How?

4. How many speech courses have you taken?

The three teachers in this small sample population defined good speech as being primarily good enunciation. In defining speech fright, two teachers defined it primarily in terms of forgetting the material when the child was up in front of the class; and the other teacher defined it primarily in terms of a fear or inability to face a class.

With respect to whether speech should be taught as a separate subject or be incorporated into the teaching of other subjects, two teachers indicated that speech should be integrated into the general curriculum, while one felt it would be better taught in a separate situation.

In regard to the questions as to whether and how the teacher ought to call attention to the child's speech, one teacher said that she had no opinions; one teacher felt that a child should be told in private about his speech. In terms of speech courses taken, only one teacher of the three had had a speech course. This was a beginning speech course at the college level.

The teachers responded meaningfully to this short questionnaire in terms of directions and concepts intrinsic to it.

H. Differences in Speech Anxiety Between the Grades

Do the children in the lower grades reveal patterns on both observed speech fright and self-reported speech fright which are different from those observed and reported in the higher grades?

A first, third, and sixth grade class, each with a population of 15, were observed during their clay speeches and rated as to their degree of speech fright. The same children were also asked, via direct questioning with the Car Test, whether they were feeling speech fright. Frequency comparisons were made, and tests of chi square were applied.

When the observations of speech fright frequency were compared, it was found that there were no significant differences in speech fright frequencies between the first, third, and sixth grades.

When the scores of speech fright frequency, obtained from the direct questioning (Car Test) at each grade level were compared, it was found that there was a significant difference at the 1 per cent level of confidence. The scores showed that children in the higher grades indicated on the direct questioning (Car Test) that they had significantly more speech fright than the children in the lower grades.

Thus, the children, when observed, seemed to show no significant speech fright differences between grade levels. But when they were asked about their level of speech fright, they reported a significantly higher frequency of speech fright in the higher grades. This might indicate that two different phenomena are involved and are being measured.

I. Major Conclusions of Pilot Study

1. In this pilot study, the data may be accepted at face value; that is, reliable observed measures of anxiety are just that--expert observations. The same is true with the introspective reports given.

2. This pilot study does support the literature, in that introspective reports are not positively correlated to observation reports.

3. The trained observers are reliable with respect to the measurement of both speech ability and speech fright. The grade-related introspective devices appear to be most

reliable and are correlated with each other.

4. The significant correlation between observers indicates that similar phenomena are identically being seen; namely, signs of speech fright and signs of speech ability.

5. The Sally Picture Test is more appropriate for the earlier grades than is the Ross Questionnaire. Both tests can be interpreted to infer attitudes toward the speaking situation.

6. Empirically, it was indicated that samples drawn from kindergarten, second, fourth, and sixth grades would be predictive.[99]

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[99] John H. Gaeth, Ph.D., Professor of Audiology, and Director of Hearing Clinic and of the Deaf Education Program, "Verbal and Non-verbal Learning in Children, Including Those with Hearing Losses," (Co-operative Research Project 1001, 1960, John H. Gaeth). This report shows that, in a variety of studies, differences between adjacent grades were seldom statistically significant; however, differences between every other grade usually were. In conversation with Dr. Gaeth on June 20, 1966, he further indicated that, whenever the maturation and development of children were normal, this phenomenon held true.

CHAPTER III

Subjects, Materials, and Procedures

A. Subjects

    1. Description of Schools and Their Designated Purpose for the Study

        a. O. W. Holmes Elementary

        b. Dossin Elementary

        c. Herman Elementary

    2. The Sample Population

B. Materials

    1. Car on Racetrack

    2. Set of Childrens's Puppets

    3. Sally Picture Test

    4. Ross Questionnaire Form

    5. Researcher's Rating Form

    6. Teacher's Rating Form

    7. Teacher Questionnaire Form

C. Procedures

    1. Procedures Used in Schools

    2. Procedures with Materials

a. At the Holmes and Dossin Elementary Schools

b. At the Herman Elementary School

3. Statistical Procedures

CHAPTER III

Subjects, Materials, and Procedures

A. Subjects

1. Description of the Schools and Their Designated Purpose for the Study

a. O. W. Holmes Elementary

The O. W. Holmes Elementary public school is located in southwest Detroit in a neighborhood where most of the homes are one-and two-story frame houses. There are many white, Catholic, Polish families living in this area, families who settled there several years before. The assistant principal remarked of the neighborhood, "It is not expected to change."[100] The neighborhood is older (many of the houses having been built thirty or forty years ago) and is considered stable. Across the railroad tracks and about two miles away, there is a Negro community. The school caters to a population of approximately seven hundred children; 85 per cent of these children are white, and 15 per cent are Negro. The fathers of these children are primarily factory workers with high school educations.

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[100] Communicated to the writer by the assistant principal of the Holmes School in a conversation on April 27, 1966.

Two kinds of paper-and-pencil tests were given to the children of this school in order to ascertain norms for speech fright. Teacher attitude questionnaires were given to the teachers to fill out.

b. Dossin Elementary

The Dossin Elementary public school is located in North West Detroit; it is situated in a newer neighborhood where most of the houses are one-and two-story brick. This school district lies at the outer rim of the city. It is located in a white, Catholic and Protestant neighborhood and serves approximately six hundred children. Eighty per cent of the children are white, and 20 per cent are Negro. The Negro children do not live within the boundaries of this school district and are brought in by bus. The majority of the parents of the white children are in professional occupations and have college educations. Most of the parents of the Negro children are workers and have high school educations or less.

Two types of paper-and-pencil tests were given to the children at this school in order to ascertain norms for speech fright. The teachers were given teacher attitude questionnaires to fill out.

c. Herman Elementary

The Herman Elementary public school is located in West Detroit and is fairly close to the outer rim of the city. Directly behind the school is a city housing project which houses very low income families. Adjacent to the other sides of the school are small, older, one-and two-story frame houses which are modest, attractive, and cleanly kept. Farther away from the school, but within the school district, are newer homes. This neighborhood is predominantly white, Catholic and Protestant. The school also has a Negro population (about 30% of the school population), most of whom are brought in by bus. The school caters to a population of approximately eighteen hundred elementary school children who can be classified into three groups: (1) The low income group which resides in the housing project are

80 percent white and 20 per cent Negro. Approximately 200 of the 529 families from this group are families without fathers. The average education of the parents in this group is below high school level. (2) The second group of children at this school is comprised of the middle class Negro children who are brought into the school district by bus. The parents of the children in this group, for the most part, have at least a high school education or better. Approximately 128 families are included here in this grouping. (3) The third group of children are those who live outside the housing project but within the school district. These children represent a low middle class or upper low class grouping. About 1 to 2 per cent of the parents in this group are of professional status; most of them have at least a high school education. Approximately 234 families are included in this grouping. The principal of the Herman School considers this school to have a representative cross-section of the Detroit elementary public school population.

This school was selected for in depth observation of speech anxiety and speech ability within the grades. Here the students were personally interviewed with respect to speech anxiety; the paper-and-pencil tests were individually given to the children, and the teachers were individually interviewed regarding the teacher questionnaire. The teachers here were also asked to rate their students in regard to what they felt were their speech anxieties and speech ability.

2. The Sample Population

A total of 1,166 elementary school children were involved in this study, along with 28 elementary school teachers from the aforementioned three schools. Sixty children from each grade were selected for the study, since past studies indicate that from 50 to 55 students seems to provide a fair and adequate representation.[101]

B. Materials

The materials used in this study were:

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[101] John H. Gaeth, Ph.D., Professor of Audiology, Director of Hearing Clinic and of the Deaf Education Program. Dr. Gaeth, in a conversation with the writer on June 20, 1966, said that his experiments showed that, in extensive studies with elementary school children, sample sizes of from 50 to 55 were adequate for statistical analysis.

1. Car on Racetrack (for direct questioning)

    This test was used to determine the relative degree of speech "fright" which the child could indicate by moving a car along a racetrack, the furthest point representing high speech fright.

2. Set of Children's Puppets (for indirect questioning)

    This test was used to determine indirectly what the child himself might be feeling with respect to speech fright by allowing him to project those feelings onto the puppets.

3. Sally Picture Test

    This paper-and-pencil test was used to determine the primary grades' speech attitudes about speech fright. The test consisted of five faces, ranging in expression from a very happy face to a very sad one. The child was to choose the face most like his in the speaking situation.

4. Ross Questionnaire Form

    This paper-and-pencil test was used to determine the speech attitudes of children in the upper elementary grades about speech fright. The test consisted of 22 questions asking the child to indicate the various symptoms of speech fright.

5. Researcher's Rating Form

This form was used to score the child's speech ability and speech fright. A rating of one through five could be indicated on this form.

6. Teacher's Rating Form

This form was used to evaluate and score the child's speech ability and speech fright. A rating of one through five could be indicated on this form.

7. Teacher Questionnaire Form

This form consisted of six questions asked to determine teacher attitudes with respect to speech ability and speech fright.

C. Procedures

1. Procedures Used in Schools

The Holmes and Dossin elementary schools were involved only in the Ross and Sally paper-and-pencil tests. This took ten minutes of the teacher's time to administer. The Herman School was involved in a more intensive study. Here the researchers spent approximately one hour in each classroom observing speech fright and speech ability. Then each child was taken out of the classroom for a private interview regarding his feelings concerning speech fright. Each interview ran five to seven minutes. The researchers averaged one grade per day. In this first-hand survey study, only kindergarten, second, fourth, and sixth grades were observed by the researchers. Past studies have indicated that the maturation process proceeds along these lines of skipped grades.[102]

In the Holmes and Dossin Schools, where only the paper-and-pencil tests were administered, kindergarten, first, second, third, fourth, fifth, and sixth grades were used. However, in tabulating the results, the first and second grade children were combined; the third and fourth grade children were combined; and the fifth and sixth grade children were combined.

2. Procedures with Materials

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[102] Gaeth, op. cit., (above, note 99).

a) At the Holmes and Dossin Elementary Schools

This researcher asked the principals at the Holmes and Dossin elementary schools to give each of their teachers from kindergarten through the sixth grade the Sally Test or the Ross Test to administer to their pupils. The Sally Test was designated to be given to children from kindergarten through the fourth grade; the Ross Test was to be given in the fifth and sixth grades. The teachers who administered the Sally Picture Test simply distributed the test and then read the directions aloud to the children. The directions read: "How do you feel when you talk to the class? Which face is you when you talk to the class? Color you!" The teachers were told not to discuss the test, but were merely to read the directions to the children three times. The teachers who administered the Ross Questionnaire form were asked to follow the same procedure, but their directions were different. They merely gave their class the questionnaire and said nothing to the children. This form asked the child to write yes if (those symptoms of speech fright) happened often. The parenthetical insertion was implied.

Each of the participating teachers was given a teacher questionnaire form to fill out at their own convenience. The results from the teacher questionnaires, the Sally Picture Test, and the Ross Questionnaire form were then collected by the researcher.

b) At the Herman Elementary School

At the Herman Elementary School, a more expanded study was carried out. Speech fright and speech ability were personally observed by two trained researchers; the Sally and Ross Tests were personally administered; the introspective tests were personally administered; the teachers were asked to rate each of the children in their classrooms as to speech fright and speech ability; the teachers were personally interviewed.

This writer and his assistant worked with two kindergartens, two second grade classes, two fourth grade classes, and two sixth grade classes in order to accomplish the above objectives.

The researchers went into each class and asked the teacher to leave in order that they might work alone with the class. This gave the teacher an opportunity to rate each child according to what she felt his speech ability and degree of speech fright were. When the teacher had left the room, the Sally Test and the Ross Test were administered to the children in the same manner in which it had been done in the other schools. The directions were simply read three times to the children, and they were to complete the tests by themselves. When the children had completed one of the two tests, according to their grade level, one researcher went up on front of the room and told the children that they were going to play a game. He stated that he would call each person up so that he could tell what he was doing with a piece of clay. He stressed that one could do all sorts of things with a piece of clay and tell about it as one did so. Then he demonstrated how he might do things with the clay and so related this to the children. It was emphasized that there were many different things that could be done, and that they did not need to copy or to imitate what others in the class might do. In any case, if a child could not think of what to say, he could just hold the clay and say, "I'm holding the clay; I'm holding the clay, etc." When the researcher was satisfied that the children in the class understood what was expected of them, he called on the first child to begin.

As each child spoke, the two researchers scored them as to their level of speech fright and their speech ability. (See pilot study as to general procedures for this.) When all of the children had had their turns, the teacher was called back to the class. It was at this time that the teachers were asked to return their rating sheets for each of the children and personally asked (usually in the privacy of the teachers' lounge) those questions on the teacher's questionnaire. (See Appendix.) When the teacher returned, each child was taken separately into a room and asked to sit down beside the interviewer. In front of the child on a table was a car on a racetrack and several realistic, child-like puppets in a simulated grouping where one of the child-puppets was supposedly speaking to the others.

The child was first asked how he feels when he stands up to speak in front of the class. Whatever word the child said was then evaluated with respect to the car on the racetrack. For example, if the child said "fine," the interviewer, pointing to the car on the racetrack, said, "This beginning point is very fine; this middle point is not so fine; and this last point is not so fine at all." The interviewer was sure to accentuate his voice inflection and facial expressions to indicate the differences of very fine, not so fine, and not so fine at all. The former feeling was expressed in a positive manner, and the latter indicated with negative voice and gestures. The child was asked to move the car along the track to indicate the degree of positive or negative value which he gave to his own word "fine."

Another word used by the child might be "scared." In this event the interviewer, utilizing the car on the track, would say, "This point is not so scared, this point is plain scared, and this point is very scared." If the word "good" was used by the child the interviewer would say, "This point is good, this point is not so good, and this point is not so good at all." In this way, the child was made to follow through on his own word and was not subtly directed by a word that the interviewer might suggest.

After the child had slid the car along the track indicating the positive or negative aspect of his word, the interviewer looked at the puppets and said, "This puppet is speaking to the children in his class. How do you think he feels?"[103] Again, the word which the child chose to submit was used, and its positive or negative value was again evaluated by how far he moved or did not move the car along on the track. In these ways, each of the children in the classes was interviewed. It should be pointed out that, in order to keep the children from mentioning this experience to the other children in their classes, they were kept in the hall or in another room until all of the children were interviewed.

3. Statistical Procedures

In order to tabulate the results of this study, a five-point rating scale was used for all evaluative procedures. With respect to the observation speech fright form, the observation speech ability form, the Car Test, and the Sally Test, a one-through-five sequence was merely designated. (A score of one was designated to mean low speech fright, and the higher number more speech fright, so that a score of five was considered high speech fright. In the case of speech ability, one was designated to mean good speech ability, and the higher number poorer speech ability, so that a score of five was considered very poor speech ability.)

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[103] It should be pointed out that the puppets were of both sexes, and there was a set of Negro puppets as well as white puppets so that the interviewer could point out the appropriate puppet for the child to choose.

Since the Ross Test asked 22 questions, it did not readily lend itself to this five-point rating scale. Therefore, these questions were divided to take into account the five-point rating scale so that all of the tests in this study had a similar frame of reference. The division or breakdown with respect to the 22 questions in the Ross Test in order to relate it to the five-point scale was as follows: If the child indicated between one and three yes answers, a score of one was indicated. If the child indicated between four and six yes answers, a score of two was designated. If the child indicated between seven and nine yes answers, a score of three was designated. If the child indicated between ten and twelve yes answers, a score of four was designated. And if the child indicated over thirteen yes answers, a score of five was designated.[104]

After recording these results with respect to child, grade, and tests, as shown by this five-point rating scale, it was decided to combine the lows and the highs. In other words, scores of four or five on the rating scale were designated as high speech fright, scores of one and two were designated as low speech fright, and a score of three was designated as average speech fright.[105]

The number of high, low, and average speech fright scores was then compared between the grades and between researchers and teachers through the statistical analysis of chi squares which had been found to be the most appropriate measure in the study. However, several t tests are also reported in the next chapter.

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[104] It should be pointed out that this designation or division was not arbitrarily designed. For example, in an unpublished study by this writer, the original Ross and Osborne Speech Fright Test for college-age students was compared with the Ipat Psychological Test for a similar match with respect to anxiety. It was found that a breakdown similar to the one in this study also reflected the same amount of high, low and average anxiety on the Ipat Test.

[105] In terms of speech ability, a score of four or five was designated as poor speech ability; a score of one or two, as good speech ability; and a score of three, as average.

In order to determine whether a relationship existed between speech fright and poor speaking ability, the good and average speaking ability scores were then added together and compared with speech fright scores to determine if such a relationship could be found. If no significant differences were shown by chi squares, it would indicate that there was little or no such relationship.

Since the pilot study indicated the low correlation between the various tests used in this study, between the researchers and the tests, and between teachers and the tests, this statistical analysis was not used in the primary study. Instead, percentages of agreement between these subjects were specifically indicated and therein conclusions drawn.

The 5% level of confidence has been used to indicate significant differences throughout the main study.

CHAPTER IV

Presentation and Interpretation of Data

A. Introduction

B. Frequency of Speech Fright by Grades

  1. As Measured by Direct Observation

  2. As Measured by Direct Questioning (Car Test)

  3. As Measured by Indirect Questioning (Puppet Test)

  4. As Measured by Ross and Sally Tests, Administered by Researchers

  5. As Measured by Ross and Sally Tests, Administered by Individual Teachers

  6. As Reported by the Individual Teachers

C. Level and Extent of Speech Ability by Grades

  1. As Measured by Trained Observers

  2. As Reported by Individual Teachers

D. Relationship of Speech Fright to Speech Ability

  1. Analysis and Results by Grades

    a. Sixth Grade--by combining the good and average speech ability scores and comparing them with speech fright scores derived from:

      1) Direct Questioning (Car Test)
      2) Researchers' Observations
      3) Ross Test
      4) Indirect Questioning (Puppet Test)

b. Fourth Grade--by combining the good and average speech ability scores and comparing them with speech fright scores derived from:

   1) Direct Questioning (Car Test)
   2) Researchers' Observations
   3) Sally Test
   4) Indirect Questioning (Puppet Test)

c. Second Grade--by combining the good and average speech ability scores and comparing them with speech fright scores derived from:

   1) Direct Questioning (Car Test)
   2) Researchers' Observations
   3) Sally Test
   4) Indirect Questioning (Puppet Test)

d. Kindergarten--by combining the good and average speech ability scores and comparing them with speech fright scores derived from:

   1) Direct Questioning (Car Test)
   2) Researchers' Observations
   3) Sally Test
   4) Indirect Questioning (Puppet Test)

2. Chance Distribution Tables for Respective Grades

E. Comparison Between Teachers' Ratings and Researchers' Ratings

   1. Speech Fright as Measured by Observation

   2. Speech Fright as Measured by Paper-and-Pencil Tests

   3. Speech Ability Ratings

   4. Quantitative Agreement Between Teachers' Observation of Speech Fright and Researchers' Observation of Speech Fright

    5. Quantitative Difference Between Teachers' Observation of Speech Fright and Researchers' Observation of Speech Fright as Measured by Introspective Tests

F. Relative Predictive Value of Tests

- 1. Frequency of Agreement Between Tests at Each Grade
    - a. Sixth Grade
    - b. Fourth Grade
    - c. Second Grade
    - d. Kindergarten

G. Socio-economic Difference in Speech Fright Between Schools as Measured by Paper-and-Pencil Tests

H. Teacher Attitudes with respect to Speech Ability, Speech Fright, and Speech Curriculum in the Elementary Grades

I. The differences in Speech Fright according to sex, as measured by the Introspective Tests and Researchers' Observations.

J. Analysis of Mean Fright Scores (t Tests)

CHAPTER IV

Presentation and Interpretation of Data

A. Introduction

The results are presented in the same order as the statement of the problem. Thus, this chapter presents the results as follows:

(a) The frequency of speech fright by grade, and then an analysis of the differences;

(b) The relationship of speech ability and speech fright, and then an analysis of the differences;

(c) The comparison between teachers' ratings and researchers' ratings, and then an analysis of the differences, as well as an arithmetical indication of agreement;

(d) The predictive value of the various tests and indications of agreement with other tests;

(e) The differences in speech fright between the schools involved in this study, and then an analysis of their differences;

(f) Teachers' attitudes with respect to speech fright and speech ability;

(g) Speech fright according to sex, as measured by the introspective tests and Researchers' Observations;

(h) The application of t tests for this study.

It should be pointed out that sections (e), (g), and (h) are not mentioned in the Chapter I statement of the problem but, were included in the analysis and are now thought to have some relevance.

Wherever possible, tables and graphs are included to clarify statistical relationships. The tables indicate by grade and/or schools, the raw speech fright score of high, low, and average; or good, poor, and average in the case of speech ability.

The graphs are labeled and indicate speech fright and speech ability differences between grades, and between researchers and teachers. The vertical line in these graphs represents the respective grades, and the horizontal line represents the number of pupils.

The statistical analysis is found under the tables.

B. Frequency of Speech Fright by Grades

1. As Measured by Direct Observation

a. Breakdown of Scores

In a population of 66 sixth-graders, 65 fourth-graders. 61 second-graders, and 53 kindergarteners at the Herman Elementary School (for a total of 245 children), the following table illustrates the breakdown as to high speech fright, low speech fright, and average speech fright:

Fig. 1 Representation of Observed Speech Fright (Researchers)

	6th Grade	4th Grade	2nd Grade	Kinder-garten	
High Speech Fright	32	27	30	26	
Low Speech Fright	6	15	12	10	
Average Speech Fright	28	23	19	17	
	N=66	N=65	N=61	N=53	Total N=245

b. Analysis of Differences

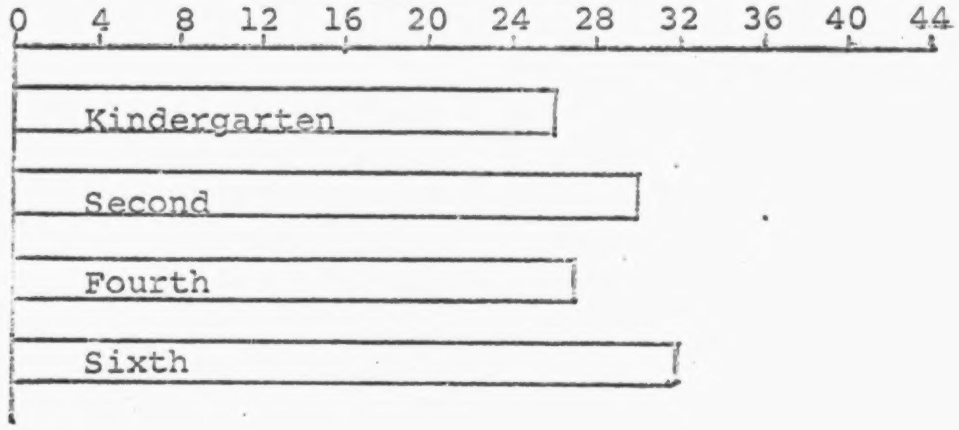
(1) Between the 6th grade and the 4th grade, a chi square of 5.3, was found which was not significant at the 5 per cent level but was at the 10 per cent level of significance.

(2) Between the 6th grade and the 2nd grade, a chi square of 3.679; not significant.

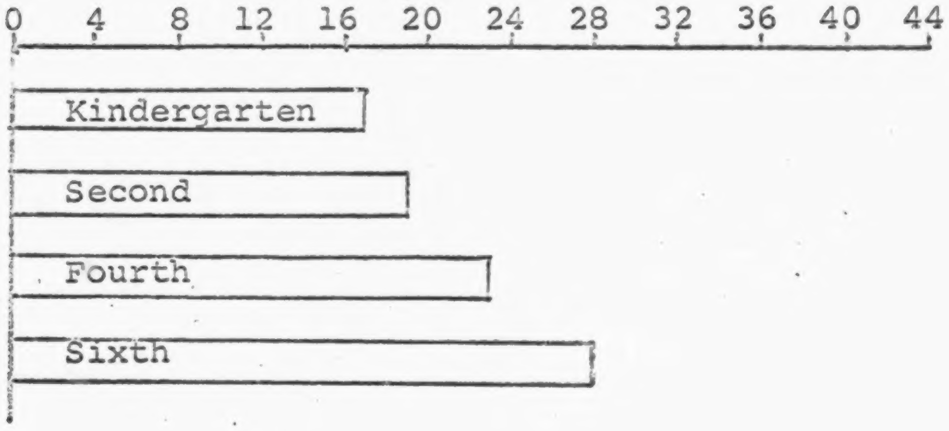
Frequency of Speech Fright by Grades as shown by
(two observers) direct observation at the Herman School

Figure 2

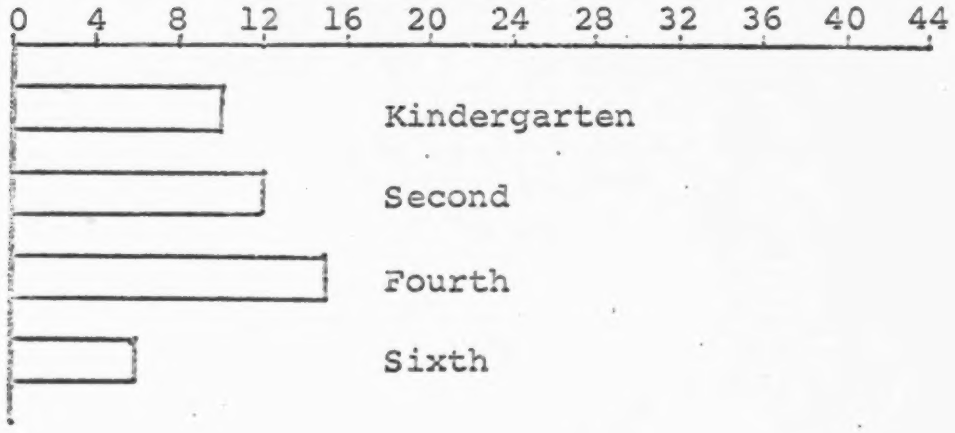
High Speech Fright



Average Speech Fright



Low Speech Fright



(3) Between the 6th grade and kindergarten, a chi square of 2.993; not significant.

(4) Between the 4th grade and the 2nd grade, a chi square of .742; not significant.

(5) Between the 4th grade and kindergarten, a chi square of .700; not significant.

(6) Between the 2nd grade and kindergarten, a chi square of .010; not significant.

(7) The overall chi square of this table was found to be 6.061, which was not significant.

2. Frequency of speech fright by grades as Measured by Direct Questioning of the child via the Car Test

a. Breakdown of scores

In the same population at the Herman Elementary School, the following table illustrates the breakdown as to high, low, and average speech fright:

Figure 3 Representation of Introspective Speech Fright (Car Test)

	6th Grade	4th Grade	2nd Grade	Kindergarten
High Speech Fright	19	15	10	11
Low Speech Fright	11	28	39	26
Average Speech Fright	36	22	12	16
	N = 66	N = 65	N = 61	N = 53
				Total N = 245

b. Analysis of Differences

(1) Between the 6th grade and the 4th grade, a chi square of 11.375 indicates a significant difference at the 1 per cent level.

(2) Between the 6th grade and the 2nd grade, a chi square of 30.417 indicates a significant difference at the 1 per cent level.

(3) Between 6th grade and kindergarten, a chi square of 14.901 indicates a significant difference at the 1 percent level.

(4) Between the 4th and the 2nd grade, a chi square of 5.691 indicates no significant difference; however, it was significant at the 10 per cent level of confidence.

(5) Between the 4th grade and kindergarten, a chi square of .417 is not significant.

(6) Between the 2nd grade and kindergarten, a chi square of 2.656 is not significant.

(7) The overall chi square of this table is 31.344 which indicates a significant difference at the 1 per cent level.

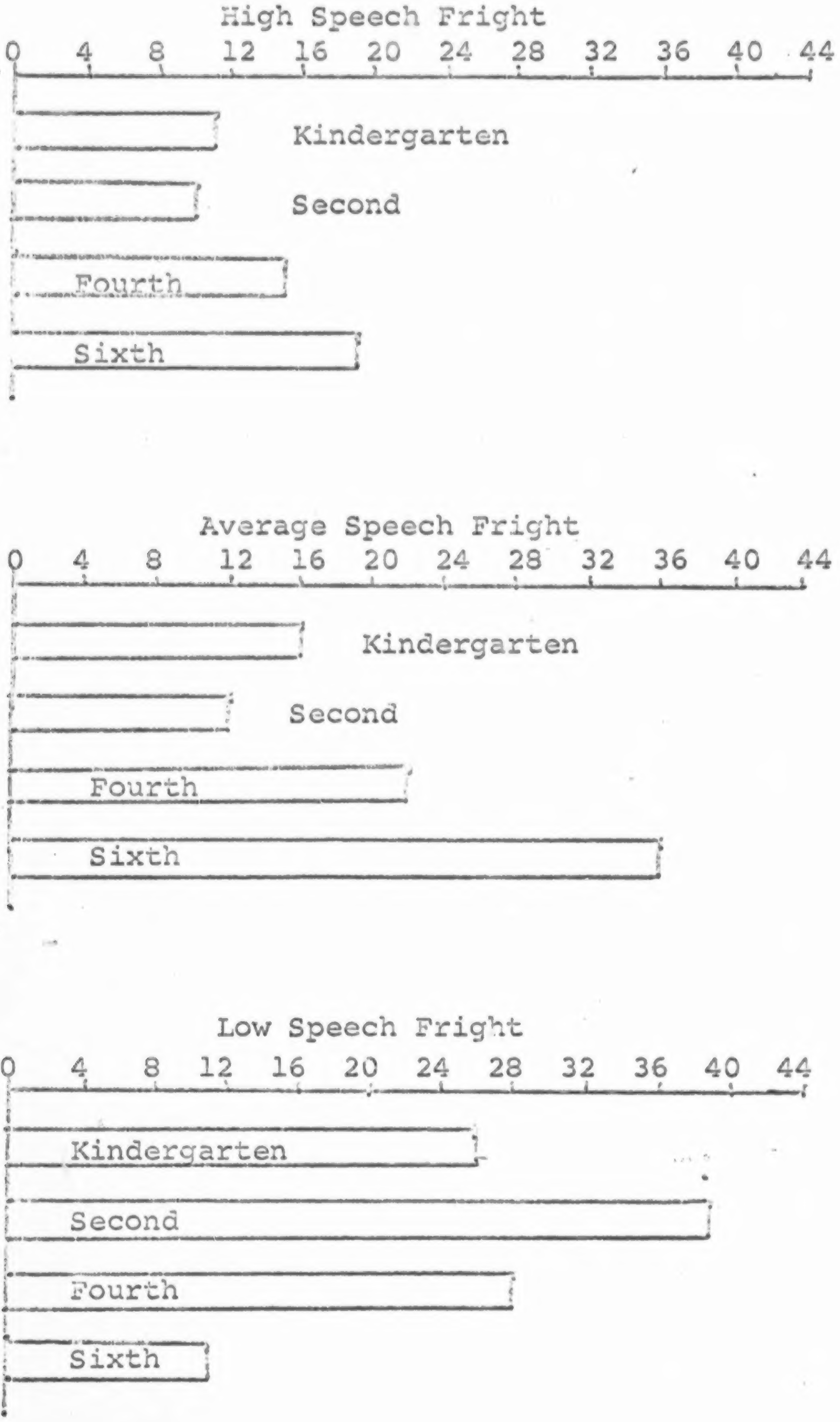
3. Frequency of speech fright by grades as Measured by Questioning (Puppet Test)

a. Breakdown of Scores

In the same population of 66 sixth-graders, 65 fourth-graders, 61 second-graders, and 53 kindergarteners at the Herman Elementary School, the following table illustrates the breakdown as to high, low, and average speech fright:

Frequency of Speech Fright by Grades as shown By Direct Questioning of each Child via Car Test at The Herman School

Figure 4



High Speech Fright

Average Speech Fright

Low Speech Fright

Fig. 5 Representation of Introspective Speech Fright (Puppet Test)

	6th Grade	4th Grade	2nd Grade	Kinder- garten	
High Speech Fright	15	16	11	19	
Low Speech Fright	17	27	29	19	
Average Speech Fright	34	22	21	15	
	N=66	N=65	N=61	N=53	Total N=245

b. Analysis of Differences

(1) Between the 6th grade and the 4th grade, a chi square of 4.906 indicates no significant difference; it was, however, significant at the 10 per cent level.

(2) Between the 6th and 2nd grades, a chi square of 6.624 indicates a significant difference at the 5 per cent level.

(3) Between the 6th grade and kindergarten, a chi square of 6.752 indicates a significant difference at the 5 per cent level.

(4) Between the 4th and 2nd grades, a chi square of .912 is not significant.

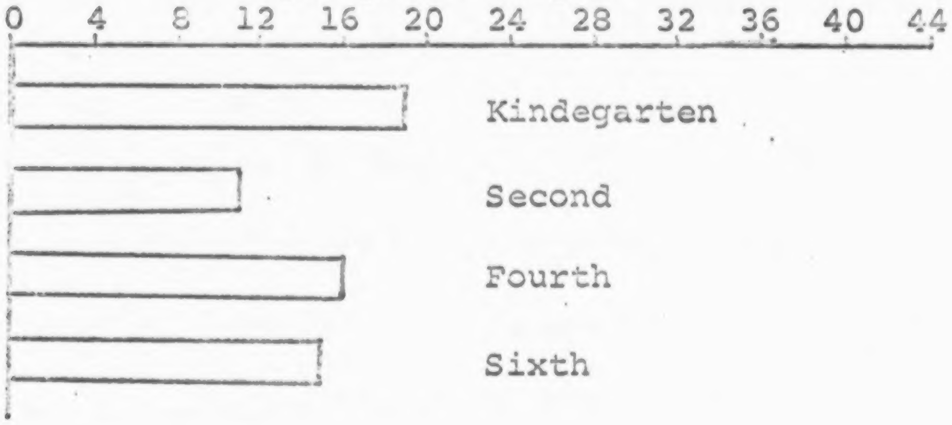
(5) Between the 4th grade and kindergarten, a chi square of 1.789 is not significant.

(6) Between the 2nd grade and kindergarten, a chi square of 4.757 is not significant; it was, however, significant at the 10 per cent level.

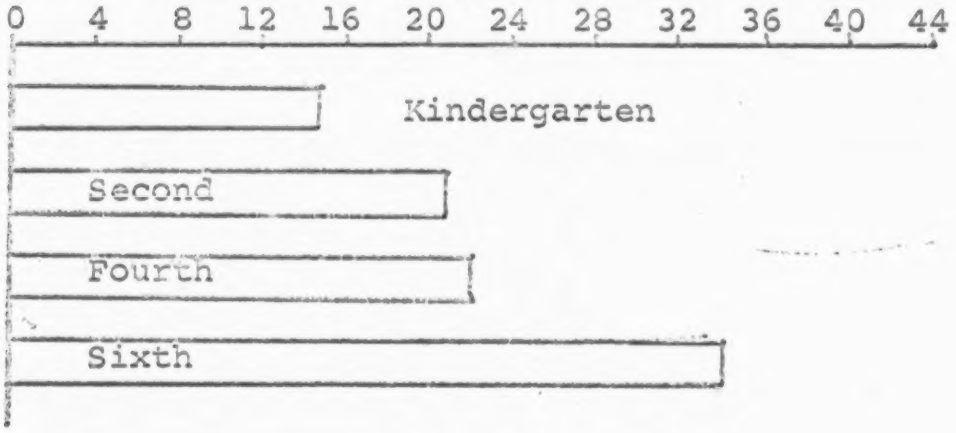
Frequency of Speech Fright By Grades As Shown By Indirect Questioning of Each Child via (Puppet Test) at The Herman School

Figure 6

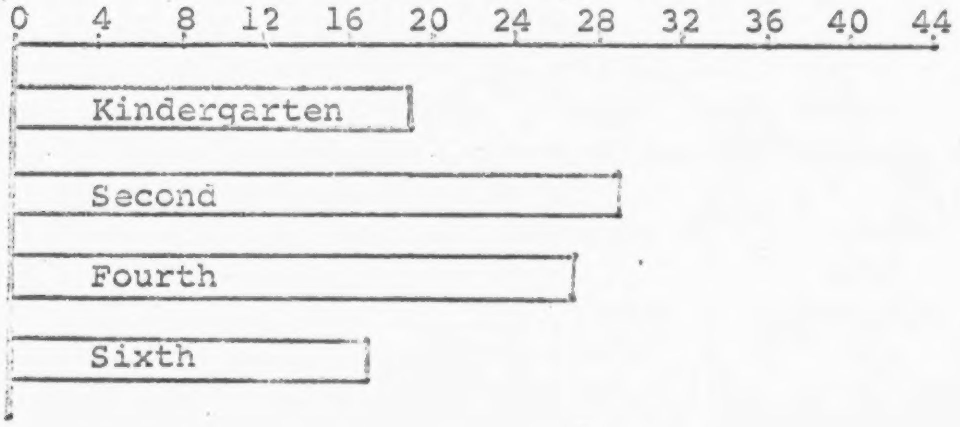
High Speech Fright



Average Speech Fright



Low Speech Fright



(7) The overall chi square of this table is 13.194 which indicates a significant difference at the 5 per cent level.

4. Frequency of speech fright by grades as Measured by the Ross and Sally Paper-and-Pencil Tests when administered by Researchers

a. Breakdown of Scores

In the same population of 66 sixth-graders, 65 fourth-graders, 61 second-graders, and 53 kindergarteners at the Herman Elementary School, the following table illustrates a breakdown as to high, low, and average speech fright:

Fig. 7 Representation of Introspective Speech Fright (Ross and Sally Tests)

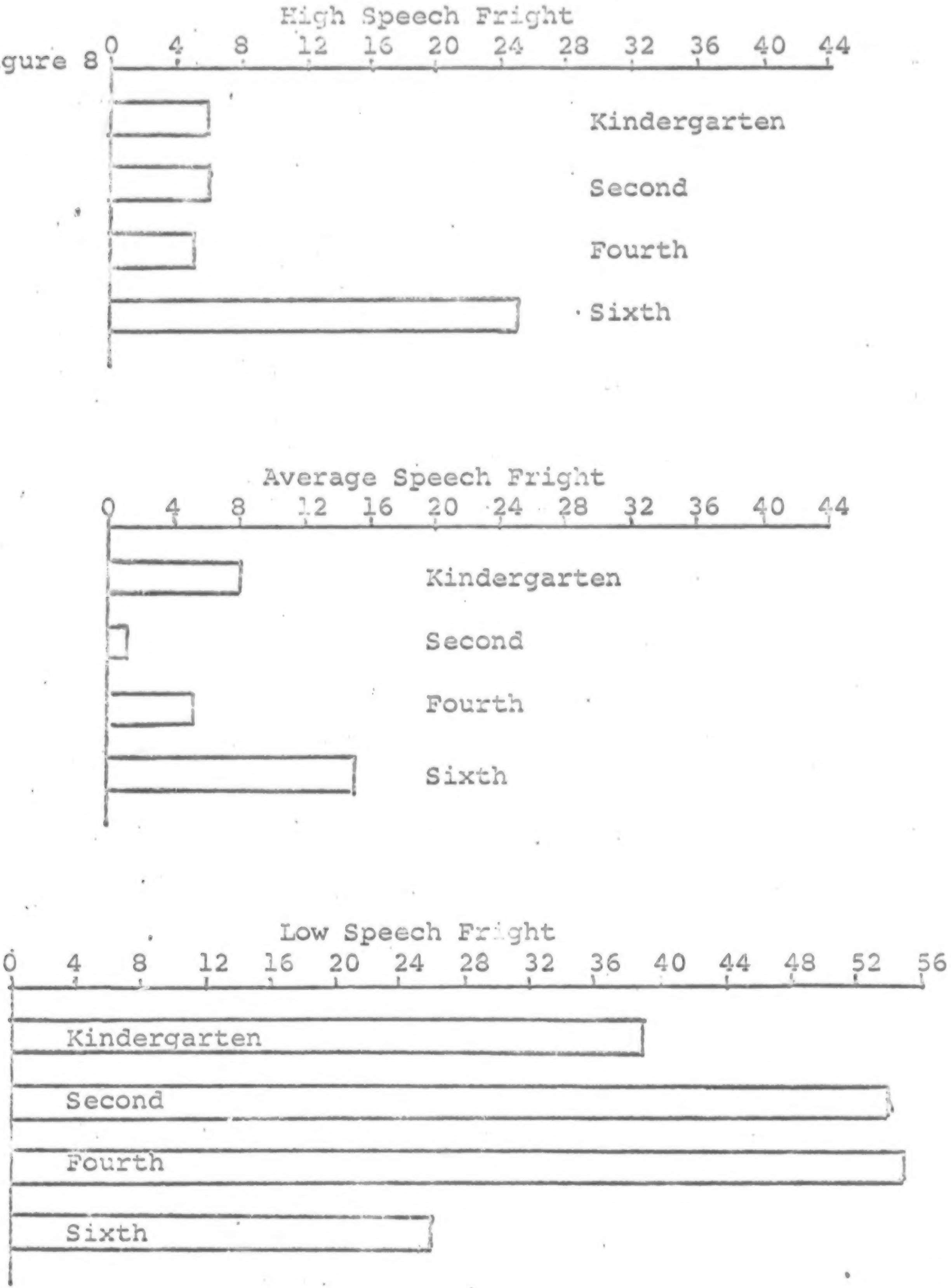
	6th Grade	4th Grade	2nd Grade	Kinder-garten	
High Speech Fright	25	5	6	6	
Low Speech Fright	26	55	54	39	
Average Speech Fright	15	5	1	8	
	N=66	N=65	N=61	N=53	Total N=245

b. Analysis of Differences

(1) Between the 6th and 4th grades, a chi square of 28.686 indicates a significant difference at the 1 per cent level.

Frequency of Speech Fright by Grades as Shown by Sally Test and Ross Test (Paper and Pencil Tests) When Administered By Researchers at the Herman School

Figure 8



(2) Between the 6th and 2nd grades, a chi square of 33.659 indicates a significant difference at the 1 per cent level.

(3) Between the 6th grade and kindergarten, a chi square of 15.139 indicates a significant difference at the 1 per cent level.

(4) Between the 4th and 2nd grades, a chi square of 2.637 is not significant.

(5) Between the 4th grade and kindergarten, a chi square of 2.393 is not significant.

(6) Between the 2nd grade and kindergarten, a chi square of 7.261 indicates a significant difference at the 5 per cent level.

(7) The overall chi square of this table is 50.013 which indicates a significant difference at the 1 per cent level.

5. Frequency of speech fright as Measured by the Ross and Sally Paper-and-Pencil Tests when Administered by Individual Teachers

a. Breakdown of Scores

In a new population of 254 fifth- and sixth-graders, 291 third- and fourth-graders, 214 first- and second-graders, and 162 kindergarteners at the Holmes and Dossin Elementary Schools (for a total population of 921), the following table illustrates the breakdown as to high, low, and average speech fright:

Fig. 9 Representation of Introspective Speech Fright (Ross and Sally Tests)

	6th Grade	4th Grade	2nd Grade	Kindergarten	
High Speech Fright	72	27	13	22	
Low Speech Fright	138	255	191	120	
Average Speech Fright	44	9	10	20	
	N=254	N=291	N=214	N=162	Total N=921

b. Analysis of Differences

(1) Between (5th-6th) and (3rd-4th), a chi square of 76.362 indicates a significant difference at the 1 per cent level.

(2) Between (5th-6th) and (1st-2nd), a chi square of 68.106 indicates a significant difference at the 1 per cent level.

(3) Between (5th-6th) and kindergarten, a chi square of 17.312 indicates a significant difference at the 1 per cent level.

(4) Between (3rd-4th) and (1st-2nd), a chi square of 2.370 is not significant.

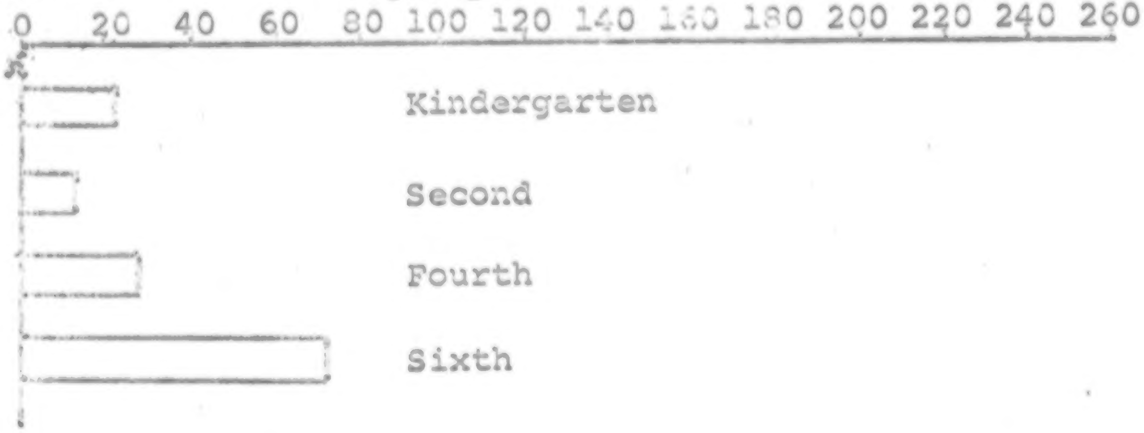
(5) Between (3rd-4th) and kindergarten, a chi square of 17.921 indicates a significant difference at the 1 per cent level.

(6) Between (1st-2nd) and kindergarten, a chi square of 13.651 indicates a significant difference at the 1 per cent level.

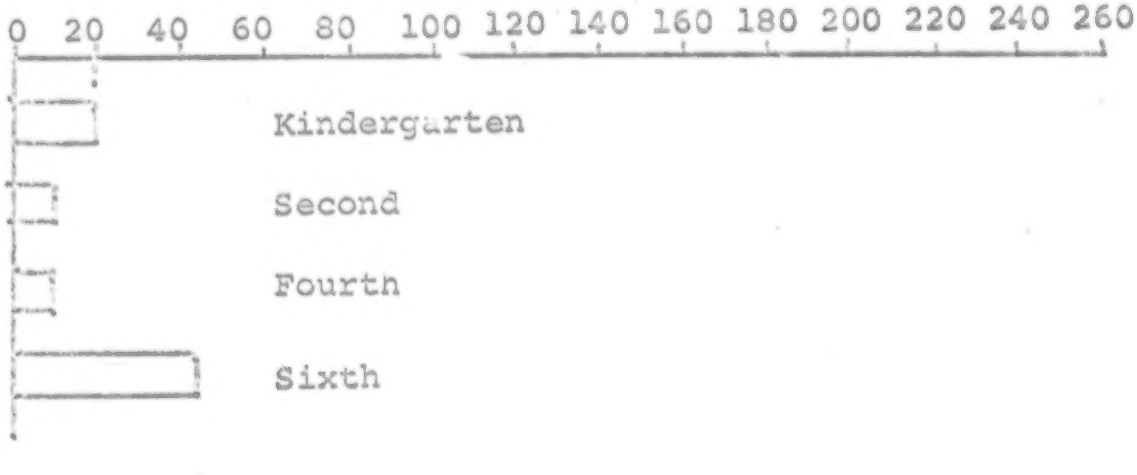
Frequency of Speech Fright By Grades As Shown By The Ross and Sally (Paper and Pencil Tests) When Administered By Teachers at The Holmes and Dossin Schools

Figure 10

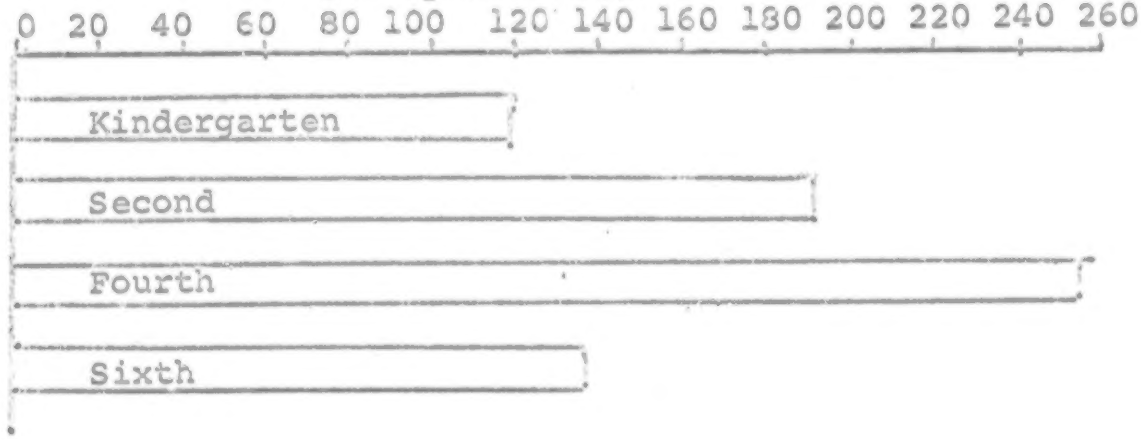
High Speech Fright



Average Speech Fright



Low Speech Fright



(7) The overall chi square of this table is 110.003 which indicates a significant difference at the 1 per cent level.

6. Frequency of speech fright between the grades, as Reported by the Individual Teachers

a. Breakdown of Scores

In a population of the same 66 sixth-graders, 64 fourth-graders, 61 second-graders, and 53 kindergartenors at the Herman Elementary School (for a total population of 245 children), the following table illustrates the breakdown as to high, low, and average speech fright:

Fig. 11 Representation of Observed Speech Fright (Teachers)

	6th Grade	4th Grade	2nd Grade	Kindergarten	
High Speech Fright	8	21	20	6	
Low Speech Fright	17	24	31	39	
Average Speech Fright	41	20	10	8	
	N=66	N=65	N=61	N=53	Total N=245

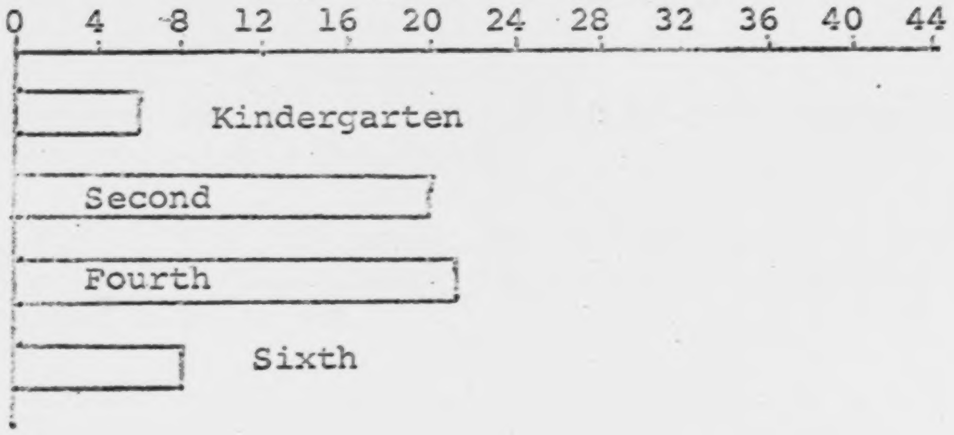
b. Analysis of Differences

(1) Between the 6th and 4th grades, a chi square of 14.296 indicates a significant difference at the 1 per cent level.

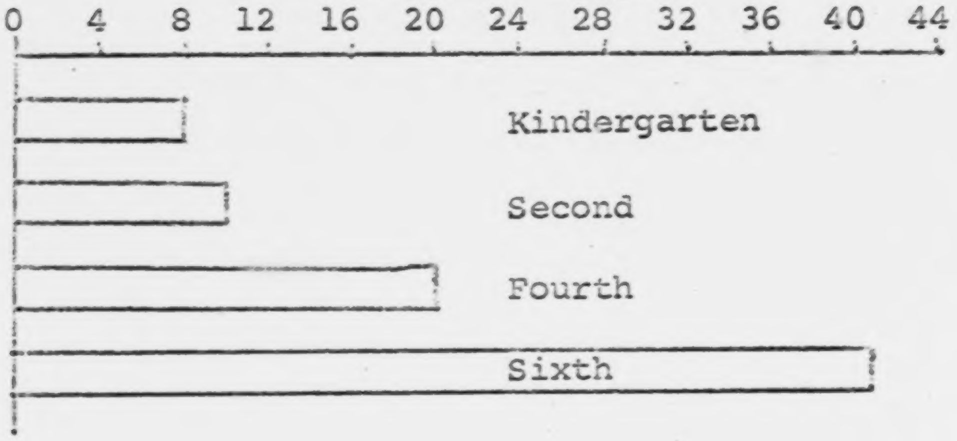
Frequency of Speech Fright Between Grades As
Reported By the Individual Teachers at The Herman School

Figure 12

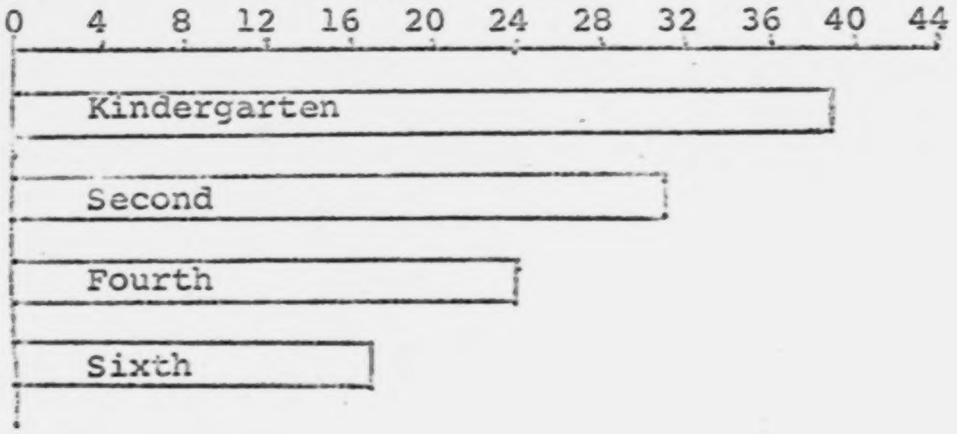
High Speech Fright



Average Speech Fright



Low Speech Fright



(2) Between the 6th and 2nd grades, a chi square of 27.954 indicates a significant difference at the 1 per cent level.

(3) Between the 6th grade and kindergarten, a chi square of 30.338 indicates a significant difference at the 1 per cent level.

(4) Between the 4th and 2nd grades, a chi square of 4.234 is not significant.

(5) Between the 4th grade and kindergarten, a chi square of 15.969 indicates a significant difference at the 1 per cent level.

(6) Between the 2nd grade and kindergarten, a chi square of 8.212 indicates a significant difference at the 5 per cent level.

(7) The overall chi square of this table is 56.366 which indicates a significant difference at the 1 per cent level.

C. Level and Extent of Speech Ability by Grades

1. Level and extent of speech ability between the grades as Measured by Trained Observers

a. Breakdown of Scores

In a population of the same 66 sixth-graders, 65 fourth-graders, 61 second-graders, and 53 kindergarteners at the Herman Elementary School (for a total population of 245 children), the following table illustrates the breakdown as to poor, good, and average speech ability:

Fig. 13 Representation of Observed Speech Ability (Researchers)

	6th Grade	4th Grade	2nd Grade	Kindergarten	
Poor Speech Ability	11	9	16	18	
Good Speech Ability	15	24	18	8	
Average Speech Ability	40	32	27	27	Total
	N=66	N=65	N=61	N=53	N=245

b. Analysis of Differences

(1) Between the 6th and 4th grades, a chi square of 3.090 is not significant.

(2) Between the 6th and 2nd grades, a chi square of 3.537 is not significant.

(3) Between the 6th grade and kindergarten, a chi square of 5.033 is not significant at the 5 per cent level, but was significant at the 10 per cent level.

(4) Between the 4th and 2nd grades, a chi square of 3.112 is not significant.

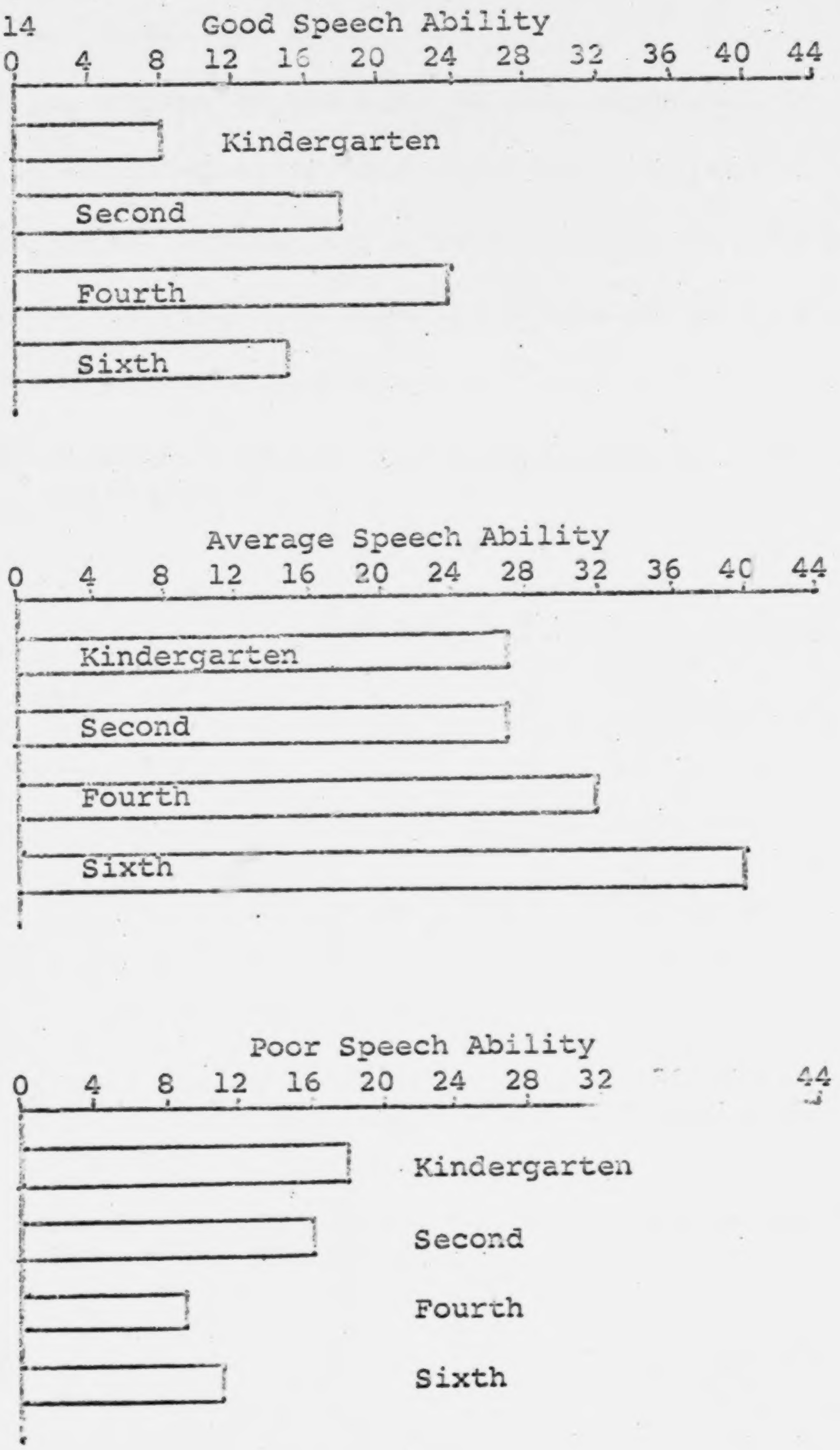
(5) Between the 4th grade and kindergarten, a chi square of 10.399 indicates a significant difference at the 1 per cent level.

(6) Between the 2nd grade and kindergarten, a chi square of 3.436 is not significant.

(7) The overall chi square of this table is 14.362 which indicates a significant difference at the 5 per cent level.

Frequency of Speech Ability Between the Grades As Shown By Trained Observers at The Herman School

Figure 14


Good Speech Ability

Average Speech Ability

Poor Speech Ability

2. Level and extent of speech ability between the grades as Reported by the Individual Teachers

a. Breakdown of Scores

In a population of the same 66 sixth-graders, 64 fourth-graders, 61 second-graders, and 53 kindergarteners at the Herman Elementary School (for a total population of 245 children), the following table illustrates the breakdown as to poor, good, and average speech ability:

Fig. 15 Representation of Observed Speech Ability (Teachers)

	6th Grade	4th Grade	2nd Grade	Kindergarten	Total
Poor Speech Ability	8	25	3	5	
Good Speech Ability	21	9	28	36	
Average Speech Ability	37	31	30	12	
	N=66	N=65	N=61	N=53	N=245

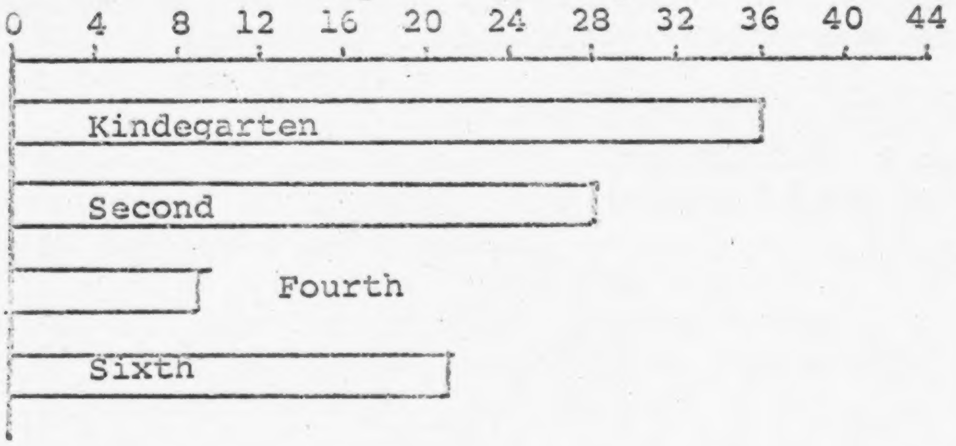
b. Analysis of Differences

(1) Between the 6th and 4th grades, a chi square of 14.035 indicates a significant difference at the 1 per cent level.

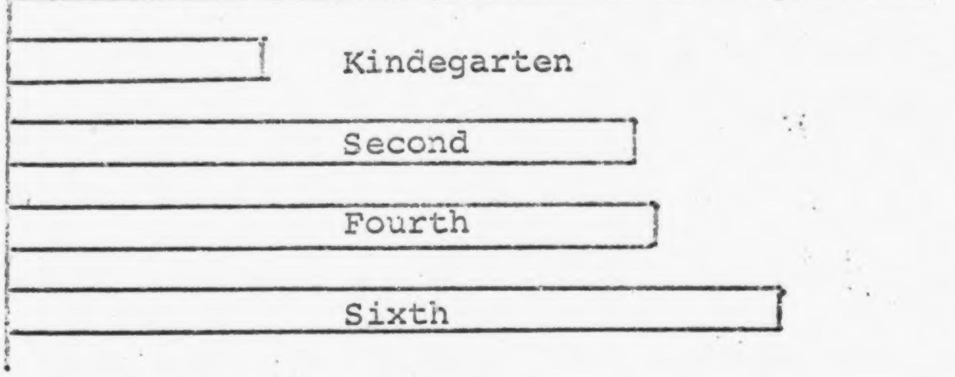
(2) Between the 6th and 2nd grades, a chi square of 3.867 is not significant.

Frequency of Speech Ability Between the Grades As
Reported By the Individual Teachers' at The Herman School

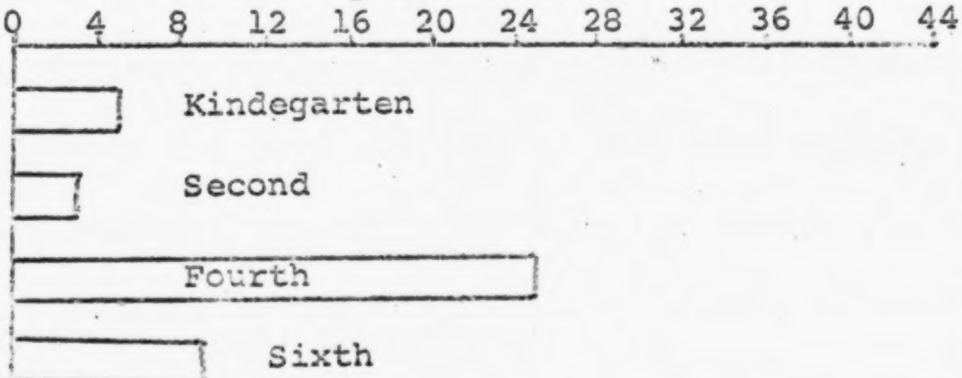
Figure 16 Good Speech Ability



Average Speech Ability



Poor Speech Ability



(3) Between the 6th grade and kindergarten, a chi square of 16.112 indicates a significant difference at the 1 per cent level.

(4) Between the 4th and 2nd grades, a chi square of 27.116 indicates a significant difference at the 1 per cent level.

(5) Between the 4th grade and kindergarten, a chi square of 38.162 indicates a significant difference at the 1 per cent level.

(6) Between the 2nd grade and kindergarten, a chi square of 8.641 indicates a significant difference at the 5 per cent level.

(7) The overall chi square of this table is 57.848 which indicates a significant difference at the 1 per cent level.

D. Relationship of Speech Fright to Speech Ability

In order to determine whether a relationship exists between speech fright and poor speaking ability, all of the speech fright scores at a given grade level were charted in terms of high, low, and average, These scores run vertically on the table. Next, all of the scores at each designation (high, low, and average) were divided according to their observed speaking ability. These scores run horizontally on the table. The good and average speaking ability scores were then combined and compared with the speech fright scores to determine whether there was a relationship between them.

If there was no significant difference as shown by chi squares, it would indicate that there was little or no relationship between poor speaking ability and high speech fright. It should be pointed out that the scores in these tables are not, in most instances, a chance distribution. (See chance distribution table at the end of this section).

1. Analysis and Results by Grades

    a. Sixth Grade

        1) Direct Questioning (Car Test)

Relationship between speech ability and speech fright, as shown by combining the good and the average speech ability scores in the sixth grade and comparing them with the speech fright scores of the sixth grade, derived from Direct Questioning (Car Test).

When average and good speech ability scores are combined and compared with speech fright scores (derived by Direct Questioning), a chi square of .002 is obtained, which is not significant.[106]

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[106]

Observed	16	9	30
Expected	19	11	36

X^2=.002

Fig. 17 Relationship of Speech Ability to Direct Questioning (Car Test) of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright*	19	3	2	14
Low Speech Fright*	11	2	2	7
Average Speech Fright*	36	6	11	19
	N=66	11	15	40

2) Relationship of speech ability to speech fright, as shown by combining the good and average speech ability scores in the 6th grade and comparing them with the speech fright scores of the 6th grade as derived from Researchers' Observations

Fig. 18 Relationship of Speech Ability to Researchers' Observations of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright*	32	11	0	21
Low Speech Fright*	6	0	6	0
Average Speech Fright*	28	0	9	19
	N=66	11	15	40

Where average and good speech ability scores are combined and compared with speech fright (as derived by researchers' observation), a chi square of 1.262 is obtained, which is not significant.

3) Relationship of speech ability to speech fright as shown by combining the good and average speech abilitiy scores in the 6th grade and comparing them with the speech fright scores derived from the Ross Test.

Fig. 19 Relationship of Speech Ability to the Ross Test of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright*	25	5	6	14
Low Speech Fright*	26	3	8	15
Average Speech Fright*	15	3	1	11
	N=66	11	15	40

When average and good speech ability scores are combined and compared with speech fright (as derived via the Ross Test), a chi square of .141 is obtained, which is not significant.

4) Relationship of speech ability to speech fright as shown by combining the good and average speech ability scores in the 6th grade and comparing them with the speech fright scores derived from Indirect Questioning (Puppet Test)

Fig. 20 Relationship of Speech Ability to Indirect Questioning (Puppet Test) of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright*	15	3	2	10
Low Speech Fright*	17	2	4	11
Average Speech Fright*	34	6	9	19
	N=66	11	15	40

When average and good speech ability scores are combined and compared with speech fright scores (as derived by Indirect Questioning), a chi square of .046 is obtained, which is not significant.

b. Fourth Grade

1) Relationship of speech ability to speech fright as shown by combining the good and average speech ability scores in the 4th grade and comparing them with the speech fright scores as derived from Direct Questioning (Car Test)

Fig. 21 Relationship of Speech Ability to Direct Questioning (Car Test) of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright	15	4	3	8
Low Speech Fright	28	2	12	14
Average Speech Fright	22	3	9	10
	N=65	9	24	32

When average and good speech ability scores are combined and compared with speech fright scores (as derived by Direct Questioning), a chi square of .002 is obtained, which is not significant.

2) Relationship of speech ability to speech fright as shown by combining the good and average speech ability scores in the 4th grade and comparing them with the speech fright scores derived from Researchers' Observation

When average and good speech ability scores are combined with speech fright scores (as derived by Researchers' Observation), a chi square of 1.113 is obtained, which is not significant.

Fig. 22 Relationship of Speech Ability to Researchers' Observation of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright	27	9	1	17
Low Speech Fright	15	0	15	0
Average Speech Fright	23	0	8	15
	N=65	9	24	32

3) Relationship of speech ability to speech fright as shown by combining the good and average speech ability scores in the 4th grade and comparing them with the speech fright scores as derived from the Sally Test

Fig. 23 Relationship of Speech Ability to the Sally Test of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright	5	1	1	3
Low Speech Fright	55	7	21	27
Average Speech Fright	5	1	2	2
	N=65	9	24	32

When average and good speech ability scores are combined and compared with speech fright scores (as derived by the Sally Test), a chi square of .036 is obtained, which is not significant.

4) Relationship of speech ability to speech fright as shown by combining the good and average speech ability scores in the 4th grade and comparing them with the speech fright scores as derived from Indirect Questioning (Puppet Test)

Fig. 24 Relationship of Speech Ability to Indirect Questioning (Puppet Test) of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright	16	4	5	7
Low Speech Fright	27	2	9	16
Average Speech Fright	22	3	10	9
	N=65	9	24	32

When average and good speech ability scores are combined and compared with speech fright scores (as derived by Indirect Questioning), a chi square of .204 is obtained, which is not significant.

c. Second Grade

1) Relationship of speech ability to speech fright as shown by combining the good and average speech ability scores in the 2nd grade and comparing them with the speech fright scores as derived from Direct Questioning (Car Test)

Fig.25 Relationship of Speech Ability to Direct Questioning (Car Test) of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright	10	4	1	5
Low Speech Fright	39	10	12	17
Average Speech Fright	12	2	5	5
	N=61	16	18	27

When average and good speech ability scores are combined and compared with speech fright (as derived by Direct Questioning), a chi square of .253 is obtained, which is not significant.

2) Relationship of speech ability to speech fright as shown by combining the good and average speech ability scores in the 2nd grade and comparing them with the speech fright scores as derived by Researchers' Observation

Fig. 26 Relationship of Speech Ability to Researchers' Observation of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright	30	15	0	15
Low Speech Fright	12	0	12	0
Average Speech Fright	14	1	6	12
	N=61	16	18	27

When average and good speech ability scores are combined and compared with speech fright scores (as derived by researchers' observations), a chi square of 2.664 is obtained, which is not significant.

3) Relationship of speech ability to speech fright as shown by combining the good and average speech ability scores in the 2nd grade and comparing them with the speech fright scores as derived from the Sally Test

Fig. 27 Relationship of Speech Ability to the Sally Test of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright	6	5	0	1
Low Speech Fright	54	11	17	26
Average Speech Fright	1	0	1	0
	N=61	16	18	27

When average and good speech ability scores are combined and compared with speech fright scores (as derived by the Sally Test), a chi square of .254 is obtained, which is not significant.

4) Relationship of speech ability to speech fright as shown by combining the good and average speech ability scores in the 2nd grade and comparing them with the speech fright scores as derived from Indirect Questioning (Puppet Test)

Fig. 28 Relationship of Speech Ability to Indirect Questioning (Puppet Test) of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright	11	3	2	6
Low Speech Fright	29	8	12	9
Average Speech Fright	21	5	4	12
	N=61	16	18	27

When average and good speech ability scores are combined and compared with speech fright scores (as derived by Indirect Questioning), a chi square of .011 is obtained, which is not significant.

d. Kindergarten

1) Relationship of speech ability to speech fright as shown by combining the good and average speech ability scores in kindergarten and comparing them with the speech fright scores as derived from Direct Questioning (Car Test)

Fig. 29 Relationship of Speech Ability to Direct Questioning (Car Test) of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright	11	7	0	4
Low Speech Fright	26	9	4	13
Average Speech Fright	16	2	4	10
	N=53`	18	8	27

When average and good speech ability scores are combined and compared with speech fright scores (as derived by Direct Questioning), a chi square of 1.725 is obtained, which is not significant.

2) Relationship of speech ability to speech fright as shown by combining the good and average speech ability scores in kindergarten and comparing them with the speech fright scores as derived from Researchers' Observation

Fig. 30 Relationship of Speech Ability to Researchers' Observation of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright	26	17	0	9
Low Speech Fright	10	0	8	2
Average Speech Fright	17	1	0	16
	N=53	18	8	27

When average and good speech ability scores are combined and compared with speech fright scores (as derived by Researchers' observation), a chi square of 4.760 is obtained, which indicates no significance at the 5 per cent level, but is significant at the 10 per cent level.

3) Relationship of speech ability to speech fright as shown by combining the good and average speech ability scores in kindergarten and comparing them with the speech fright scores as derived by the Sally Test

When average and good speech ability are combined and compared with speech fright scores (as derived by the Sally Test), a chi square of .218 is obtained, which is not significant.

Fig. 31 Relationship of Speech Ability to the Sally Test of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright	6	3	0	3
Low Speech Fright	39	12	6	21
Average Speech Fright	8	3	2	3
	N=53	18	8	27

4) Relationship of speech ability to speech fright as shown by combining the good and average speech ability scores in kindergarten and comparing them with the speech fright scores as derived from Indirect Questioning (Puppet Test)

Fig. 32 Relationship of Speech Ability to Indirect Questioning (Puppet Test) of Speech Fright

		Poor Ability	Good Ability	Average Ability
High Speech Fright	19	4	3	12
Low Speech Fright	19	7	3	9
Average Speech Fright	15	7	2	6
	N=53	18	8	27

When average and good speech ability scores are compared with speech fright scores (as derived by Indirect Questioning), a chi square of .505 is obtained, which is not significant.

2. Chance Distribution Tables for Respective Grades

The chance distribution between speech ability and speech fright by grades, as shown by high, low and average speech fright on the Ross Test, Sally Test, Puppet Test, Car Test, and trained researchers' observation in comparison to speech ability as observed by researchers.

Fig. 33 Chance Distribution Table With Relationship to Tests and Speech Ability

6th Grade

Speech Fright	Poor Speech Ability	Good Speech Ability	Average Speech Ability
Ross	Chi sq.: 5.841 5% level	8.390 5% level	11.200 1% level
Direct Questioning	Chi sq.: 14.005 1% level	4.551 not significant	8.166 5% level
Projection	Chi sq.: 7.600 5% level	7.890 5% level	8.179 5% level
Observation	Chi sq.: 20.699 very significant 1% level	12.000 1% level	19.363 very significant 1% level

Fig. 33 continued

4th Grade

Speech Fright	Poor Speech Ability	Good Speech Ability	Average Speech Ability
Sally	Chi sq.: 1.605 not significant	11.491 1% level	.400 not significant
Direct Questioning	Chi sq.: 2.800 not significant	8.851 very significant 5% level	3.909 not significant
Projection	Chi sq.: .874 not significant	9.444 1% level	3.909 not significant
Observation	Chi sq.: 14.222 1% level	30.000 very significant level	.938 not significant

2nd Grade

Speech Fright	Poor Speech Ability	Good Speech Ability	Average Speech Ability
Sally	Chi sq.: 7.500 5% level	6.332 5% level	3.246 not significant
Direct	Chi sq.: 2.601 not significant	2.922 not significant	3.000 not significant
Projective	Chi sq.: 2.367 not significant	5.896 not significant	5.427 10% level
Observation	Chi sq.: 15.000 1% level	24.000 very significant 1% level	9.584 1% level

Fig. 33 continued

Kindergarten

Speech Fright	Poor Speech Ability	Good Speech Ability	Average Speech Ability
Sally	Chi sq.: 3.000 not significant	8.768 very significant 5% level	.249 not significant
Direct	Chi sq.: 6.738 5% level	4.690 10% level	6.502 5% level
Projection	Chi sq.: 7.686 5% level	2.947 not significant	2.800 not significant 5% level
Observation	Chi sq.: 16.704 1% level	10.410 1% level	28.385 very significant 1% level

E. Comparison Between Teachers' Ratings and Researchers' Ratings of speech fright and speech ability by grades

1. Speech Fright as Measured by Observations

In the same population at Herman Elementary School, of 66 sixth-graders, 65 fourth-graders, 61 second-graders, and 53 kindergarteners, the following table illustrates the comparison between teacher ratings and researcher ratings as to high, low, and average speech fright:

Fig. 34 Differences in Ratings Between Teachers and Researchers

Sixth Grade						
	High	8		High	32	
	Low	17		Low	6	
	Average	41		Average	28	
			N=66			N=66
Fourth Grade						
	High	21		High	27	
	Low	24		Low	15	
	Average	20		Average	23	
			N=65			N=65
Second Grade						
	High	20		High	30	
	Low	31		Low	12	
	Average	10		Average	19	
			N=61			N=61
Kindergarten						
	High	6		High	26	
	Low	39		Low	10	
	Average	8		Average	17	
			N=53			N=53
	Total N=245			Total N=245		

Analysis of Differences:

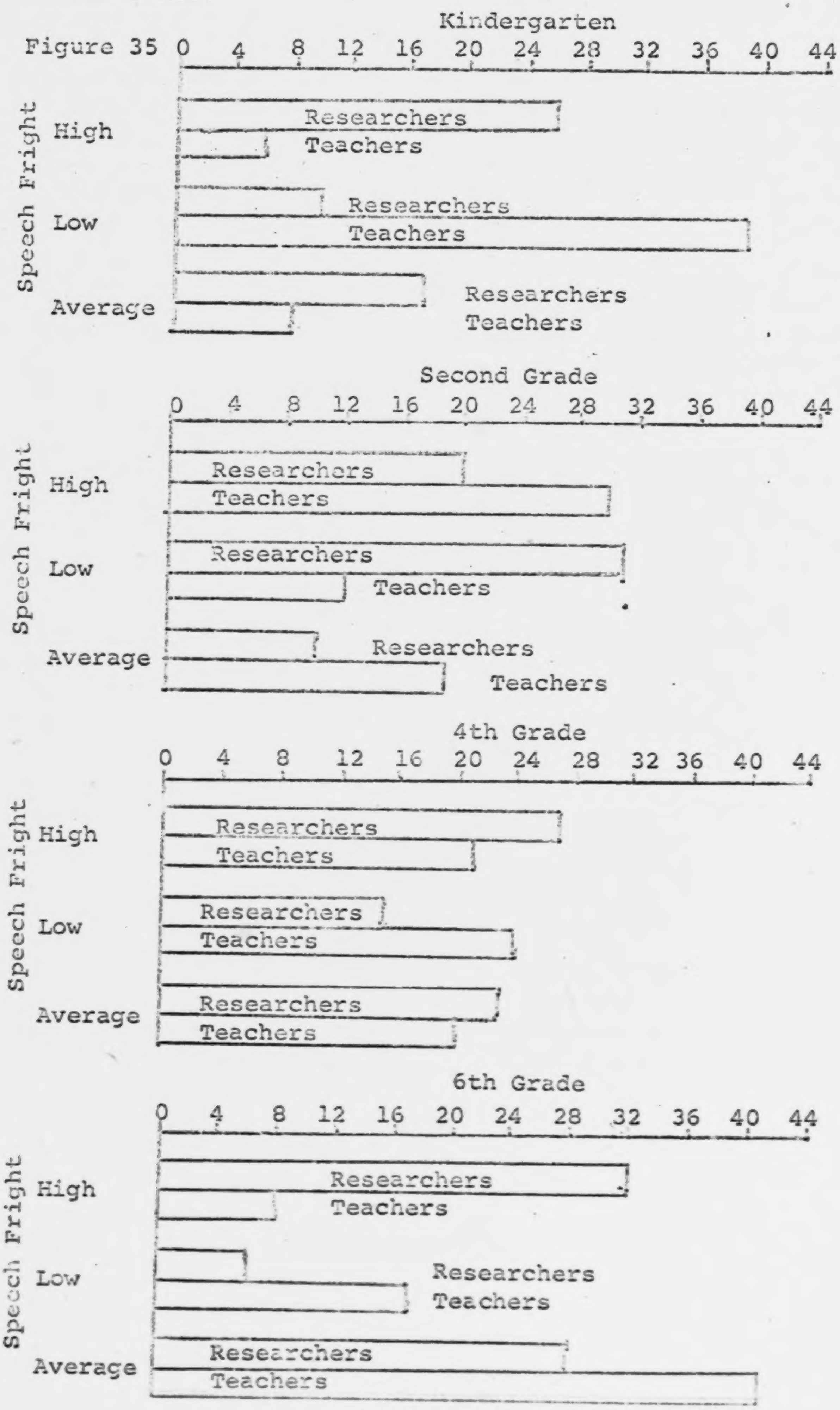
(1) Between the 6th grade ratings, a chi square of 44.201 indicates a significant difference at the 1 per cent level.

(2) Between the 4th grade ratings, a chi square of 7.124 indicates a significant difference at the 5% level.

(3) Between the 2nd grade ratings, a chi square of 24.745 indicates a significant difference at the 1 per cent level.

Comparison Between Teachers' Ratings and Researchers' Ratings fo Speech Fright as Measured by Observations at The Herman School

Figure 35



(4) Between the kindergarten ratings, a chi square of 104.248 indicates a significant difference at the 1 per cent level.

(5) The overall chi square of this table is 15.856 which is significant at the 1 per cent level.

2. Differences by grade between the paper-and-pencil tests at the Dossin and Holmes Elementary Schools, administered by teachers, and the same tests at the Herman Elementary School, administered by trained researchers

The following table illustrates these two different populations:

Fig. 36 Differences Between Teacher-Administered Tests and Researcher-Administered Tests

Teachers at Holmes & Dossin				Researchers at Herman			
5th and 6th Grades Combined	High	72		6th Grade	High	25	
	Low	138			Low	26	
	Average	44			Average	15	
			N=254				N=66
3rd and 4th Grades Combined	High	27		4th Grade	High	5	
	Low	255			Low	55	
	Average	9			Average	5	
			N=291				N=65
1st and 2nd Grades Combined	High	13		2nd Grade	High	6	
	Low	191			Low	54	
	Average	10			Average	1	
			N=214				N=61
Kindergarten	High	22		Kindergarten	High	6	
	Low	120			Low	39	
	Average	20			Average	8	
			N=162				N=53
			Total N=921				Total N=245

Analysis of Differences:

(1) Between (5th-6th) and (6th) grade, a chi square of 4.650 is not significant at the 5% level, but was significant at the 10% level.

(2) Between (3rd-4th) and (4th) grade, a chi square of 2.909 is not significant.

(3) Between (1st-2nd) and (2nd) grade, a chi square of 2.033 is not significant.

(4) Between the two kindergarten groups, a chi square of .388 is not significant.

(5) The overall chi square of this table is 3.237 which is not significant.

c. Speech Ability Ratings

In the same population at the Herman Elementary School, of 66 sixth-graders, 65 fourth-graders, 61 second-graders, and 53 kindergarteners, the following table illustrates the differences between teacher ratings and researcher ratings by grade as to poor, good, and average speech ability.

Analysis of Differences:

(1) Between 6th grade ratings, a chi square of 4.079 is not significant.

(2) Between 4th grade ratings, a chi square of 37.850 is significant at the 1 per cent level.

(3) Between 2nd grade ratings, a chi square of 16.450 is significant at the 1 per cent level.

(4) Between kindergarten ratings, a chi square of 115.721 is significant at the 1 per cent level.

(5) The overall chi square of this table is 8.164 which is significant at the 5 per cent level.

Fig. 37 Differences in Speech Ability Ratings Between Teachers and Researchers

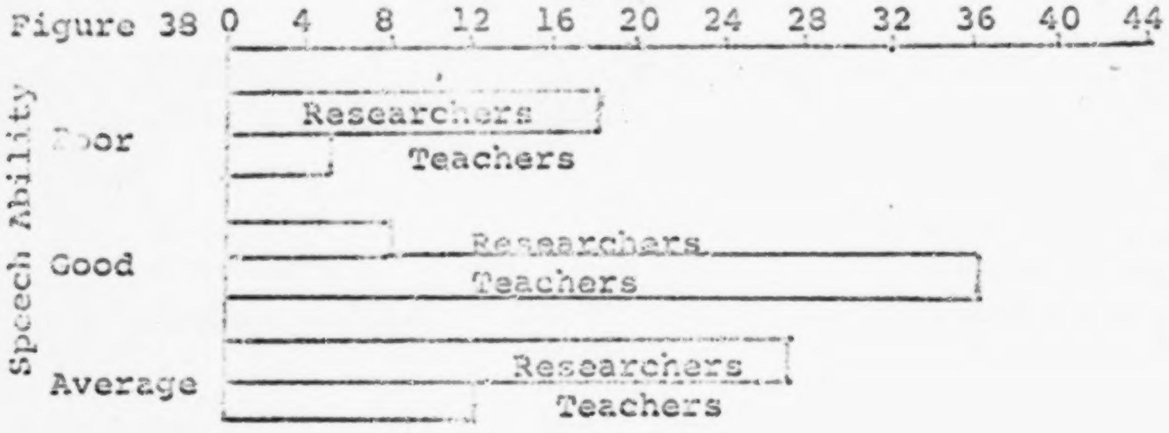
	Teachers			Researchers		
Sixth Grade	Poor	8		Poor	11	
	Good	21		Good	15	
	Average	37		Average	40	
			N=66			N=66
Fourth Grade	Poor	25		Poor	9	
	Good	9		Good	24	
	Average	31		Average	32	
			N=65			N=65
Second Grade	Poor	3		Poor	16	
	Good	28		Good	18	
	Average	30		Average	27	
			N=61			N=61
Kindergarten	Poor	5		Poor	18	
	Good	36		Good	8	
	Average	12		Average	27	
			N=53			N=53
		Total	N=245		Total	N=245

4. Quantitative Agreement Between Teachers' Observation of Speech Fright and Researchers' Observation of Speech Fright

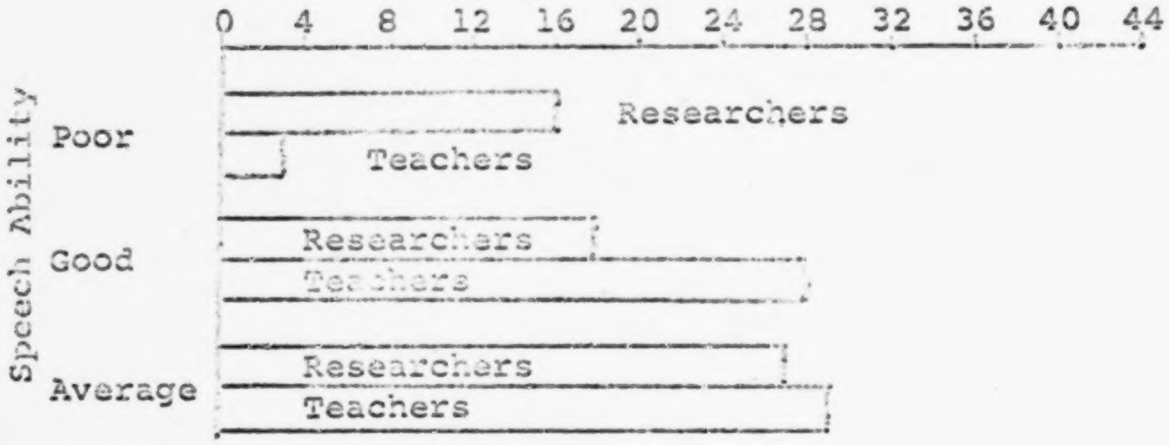
Comparison Between Teachers' Ratings and Researchers' Ratings of Speech Ability at The Herman School

Kindergarten

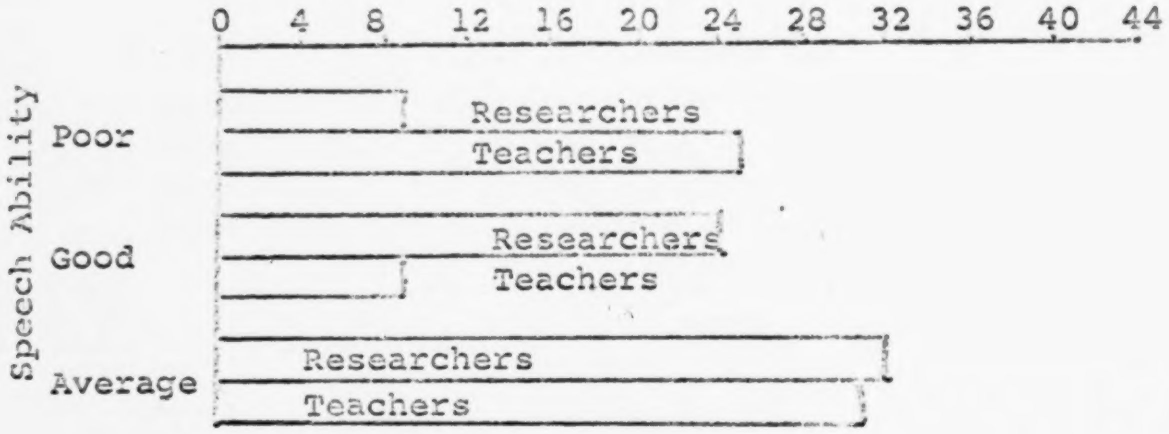
Figure 38



Second Grade



Fourth Grade



Sixth Grade

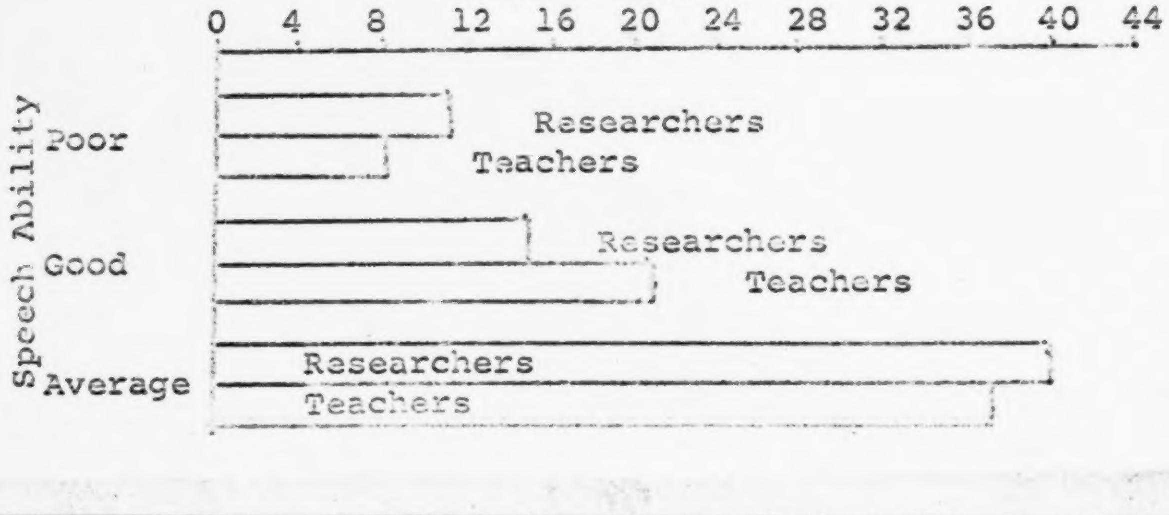


Fig. 39 Agreement Between Teachers and Researchers with Respect to Speech Fright

	Researchers' Observation of Speech Fright		Agreement		Teachers' Observation of Speech Fright	
6th Grade	High	32	High	4	High	8
	Low	6	Low	3	Low	17
	Average	28	Average	15	Average	41
4th Grade	High	27	High	11	High	21
	Low	15	Low	9	Low	24
	Average	23	Average	7	Average	20
2nd Grade	High	30	High	13	High	20
	Low	12	Low	8	Low	31
	Average	19	Average	4	Average	10
Kindergarten	High	26	High	6	High	6
	Low	10	Low	9	Low	39
	Average	17	Average	2	Average	8

5. Quantitative Differences Between Teachers' Observation of Speech Fright and Researchers' Observation of Speech Fright as Compared to Speech Fright as Measured by Introspective Tests

a) Sixth Grade

1a) As Measured by Direct Questioning:

	Teacher Observed Speech Fright	Teachers' Agreement with Direct Questioning	Direct Questioning	Researchers' Agreement with Direct Questioning	Researcher Observed Speech Fright
High	8	2	19	13	32
Low	17	0	11	1	6
Average	41	20	36	16	28

2a) As Measured by Indirect Questioning:

			Indirect Questioning		
High	8	3	15	10	32
Low	17	4	17	3	6
Average	41	23	34	15	28

3a) As Measured by Ross Paper-and-Pencil Test:

			Ross Test		
High	8	2	25	15	32
Low	17	4	26	2	6
Average	41	6	15	7	28

b) Fourth Grade

1b) As Measured by Direct Questioning:

	Teacher Observed Speech Fright	Teachers' Agreement with Direct Questioning	Direct Questioning	Researchers' Agreement with Direct Questioning	Researcher Observed Speech Fright
High	21	9	15	9	27
Low	24	14	28	10	15
Average	20	7	22	10	23

2b) As Measured by Indirect Questioning:

High	21	7	16	8	27
Low	24	10	27	3	15
Average	20	6	22	8	23

3b) As Measured by Sally Paper-and Pencil Test:

High	21	4	5	3	27
Low	24	22	55	14	15
Average	20	2	5	2	23

c) Second Grade

1c) As Measured by Direct Questioning:

	Teacher Observed Speech Fright	Teachers' Agreement with Direct Questioning	Direct Questioning	Researchers' Agreement with Direct Questioning	Researcher Observed Speech Fright
High	20	2	10	8	30
Low	31	15	39	9	12
Average	10	0	12	6	19
2c) As Measured by Indirect Questioning:					
High	20	5	11	6	30
Low	31	19	29	6	12
Average	10	5	21	5	19
3c) As Measured by Sally Paper-and Pencil-Test:					
High	20	4	6	6	30
Low	31	30	54	11	12
Average	10	0	1	0	19

d) Kindergarten

1d) As Measured by Direct Questioning:

	Teacher Observed Speech Fright	Teachers' Agreement with Direct Questioning	Direct Questioning	Researchers' Agreement with Direct Questioning	Researcher Observed Speech Fright
High	6	2	11	7	26
Low	39	16	26	5	10
Average	8	6	16	6	17

2d) As Measured by Indirect Questioning:

High	6	2	19	8	26
Low	39	16	19	4	10
Average	8	4	15	4	17

3d) As Measured by Sally Paper-and-Pencil Test:

High	6	2	6	4	26
Low	39	30	39	7	10
Average	8	0	8	2	17

F. Relative Predictive Value of Tests

1. Frequency of Agreement Between Tests at Each Grade

a. Sixth Grade

1) Between Ross Test and Direct (Car Test):

	Ross Test	Agreement	Direct
High	25	11	19
Low	26	7	11
Average	15	9	36

2) Between Ross Test and Observation

	Ross Test	Agreement	Observation
High	25	15	32
Low	26	2	6
Average	15	7	28

3) Between Ross Test and Indirect (Puppet):

	Ross Test	Agreement	Indirect
High	25	7	15
Low	26	7	17
Average	15	7	34

4) Between Direct (Car) and Indirect (Puppet):

	Direct	Agreement	Indirect
High	19	10	15
Low	11	5	17
Average	36	22	34

5) Between Direct (Car) and Observation:

	Direct	Agreement	Observation
High	19	13	32
Low	11	1	6
Average	36	16	28

continued

6) Between Indirect (Puppet) and Observation:

	Indirect	Agreement	Observation
High	15	10	32
Low	17	3	6
Average	34	15	28

b. Fourth Grade

1) Between Sally Test and Direct (Car Test):

	Sally Test	Agreement	Direct
High	5	3	15
Low	55	26	28
Average	5	3	22

2) Between Sally Test and Observation:

	Sally Test	Agreement	Observation
High	5	3	27
Low	55	14	15
Average	5	2	23

3) Between Sally Test and Indirect (Puppet):

	Sally Test	Agreement	Indirect
High	5	1	16
Low	55	21	27
Average	5	3	22

4) Between Direct (Car) and Indirect (Puppet):

	Direct	Agreement	Indirect
High	15	5	16
Low	28	10	27
Average	22	27	22

continued

5) Between Direct (Car) and Observation:

	Direct	Agreement	Observation
High	15	9	27
Low	28	10	15
Average	22	10	23

6) Between Indirect (Puppet) and Observation:

	Indirect	Agreement	Observation
High	16	8	27
Low	27	3	15
Average	22	8	23

c. Second Grade

1) Between Sally Test and Direct (Car):

	Sally Test	Agreement	Direct
High	6	4	10
Low	54	36	34
Average	1	0	12

2) Between Sally Test and Observation:

	Sally Test	Agreement	Observation
High	6	6	30
Low	54	11	12
Average	1	0	19

3) Between Sally Test and Indirect (Puppet):

	Sally Test	Agreement	Indirect
High	6	3	11
Low	54	28	29
Average	1	1	21

continued

4) Between Direct (Car) and Indirect (Puppet):

	Direct	Agreement	Indirect
High	10	2	11
Low	39	13	29
Average	12	2	21

5) Between Direct (Car) and Observation:

	Direct	Agreement	Observation
High	10	8	30
Low	39	9	12
Average	12	6	19

6) Between Indirect (Puppet) and Observation:

	Indirect	Agreement	Observation
High	11	6	30
Low	29	6	12
Average	21	5	19

d. Kindergarten

1) Between Sally Test and Direct (Car):

	Sally Test	Agreement	Direct
High	6	1	11
Low	39	18	26
Average	8	3	16

2) Between Sally Test and Observation:

	Sally Test	Agreement	Observation
High	6	4	26
Low	39	7	10
Average	8	2	17

continued

3) Between Sally Test and Indirect (Puppet):

	Sally Test	Agreement	Indirect
High	6	2	19
Low	39	12	19
Average	8	2	15

4) Between Direct (Car) and Indirect (Puppet);

	Direct	Agreement	Indirect
High	11	5	19
Low	26	8	19
Average	16	4	5

5) Between Direct (Car) and Observation:

	Direct	Agreement	Observation
High	11	7	26
Low	26	5	10
Average	16	6	17

6) Between Indirect (Puppet) and Observation:

	Indirect	Agreement	Observation
High	19	8	26
Low	19	4	10
Average	15	4	17

C. Socio-economic Difference in Speech Fright Between Schools[107] as Shown by Paper-and-Pencil Tests

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[107] Holmes and Herman Schools are roughly equivalent socio-economically; the Dossin School represents a perceptibly higher socio-economic status.

1. By Schools:

Fig. 40 Difference in Speech Fright Between the Three Elementary Schools

	DOSSIN	HOLMES	HERMAN	
High Speech Fright	58	76	42	
Low Speech Fright	380	324	174	
Average Speech Fright	29	54	29	Total Population
	N=467	N=454	N=245	N=1,166

2. Analysis of Differences:

   (1) Between the Dossin and Holmes Schools, a chi square of 14.201 indicates a significant difference at the 1 per cent level.

   (2) Between the Holmes and Herman Elementary Schools, a chi square of .013 is not significant.

   (3) Between the Herman and Dossin Schools, a chi square of 10.943 indicates a significant difference at the 1 per cent level.

   (4) The overall chi square of this table is 16.920 which indicates a significant difference at the 1 per cent level.

3. Differences by Grades within the Schools that Significantly Differ

a. Holmes and Dossin Schools

Fig. 41 Differences in Speech Fright Between the Grades at Holmes and Dossin Schools

	DOSSIN		HOLMES	
5th-6th Grades	High	26	High	46
	Low	60	Low	78
	Average	7	Average	37
		N=93		N=161
3rd-4th Grades	High	13	High	14
	Low	166	Low	89
	Average	3	Average	6
		N=182		N=109
1st-2nd Grades	High	8	High	5
	Low	87	Low	104
	Average	5	Average	5
		N=100		N=114
Kindergarten	High	11	High	11
	Low	67	Low	53
	Average	14	Average	6
		N=92		N=70
		Total N=467		Total N=457

b. Analysis of Differences:

(1) Between (5th-6th) grades at the Dossin School and (5th-6th) grades at the Holmes School, a chi square of 10.938 indicates a significant difference at the 1 per cent level.

(2) Between (3rd-4th) grades at the Dossin School and (3rd-4th) grades at the Holmes School, a chi square of 6.320 indicates a significant difference at the 5 per cent level.

(3) Between (1st-2nd) grades at the Dossin School and (1st-2nd) grades at the Holmes School, a chi square of 1.260 is not significant.

(4) Between the kindergarten classes at the Dossin and Holmes Schools, a chi square of 1.837 is not significant.

c. Dossin and Herman Schools

Fig. 42 Differences in Speech Fright Between the Grades at the Dossin and Herman Schools

		DOSSIN		HERMAN
5th-6th Grades	High	26	High	25
	Low	60	Low	26
	Average	7	Average	15
		N=93		N=66
3rd-4th Grades	High	13	High	5
	Low	166	Low	55
	Average	3	Average	5
		N=182		N=65
1st-2nd Grades	High	8	High	6
	Low	87	Low	54
	Average	5	Average	1
		N=100		N=61
Kindergarten	High	11	High	6
	Low	67	Low	39
	Average	14	Average	8
		N=92		N=53
		Total N=467		Total N=245

d. Analysis of Differences:

(1) Between (5th-6th) grades at the Dossin School and (5th-6th) grades at the Herman School, a chi square of 12.193 indicates a significant difference at the 1 per cent level.

(2) Between (3rd-4th) grades at the Dossin School and (3rd-4th) grades at the Herman School, a chi square of 5.691 indicates a significant differ- at the 1 per cent level.

(3) Between (1st-2nd) grades at the Dossin School and (1st-2nd) grades at Herman School, a chi square of 1.348 is not significant.

(4) Between thekindergarten classes at the Dossin and Herman Schools, a chi square of .012 is not significant.

H. Teacher Attitudes with Respect to Speech Ability, Speech Fright, and Speech Curriculum in the Elementary Grades; and Background in the Area of Speech, as Reported Through a Questionnaire Form

Twenty-eight elementary school teachers were asked questions with respect to speech ability, speech fright, speech curriculum, and speech background.

1. Speech Fright

a. Seventeen of the twenty-eight teachers appeared to understand the concept behind speech fright and were able to sympathetically discuss speech fright with their pupils. The majority of the 17 teach in the higher elementary grades.

b. The remaining 11 teachers indicated that they do not discuss speech fright with their pupils, and do not feel that they should. Most of these teachers work in the primary grades.

2. Speech Ability

a. Seventeen of the 28 teachers think of speech ability as not only including good voice and articulation, but also as including the broader ability of expressing thoughts and feelings.

b. The remaining 11 teachers in this category think of good speech ability as primarily being good pronunciation. The majority of these teachers were from the primary grades.

3. Speech Curriculum

Generally, the teachers indicated that speech should be integrated with, or part and parcel of, the curriculum rather than taught as a separate subject.

4. Course Background in the Area of Speech

a. The following table illustrates the number of speech courses which the 28 teachers had taken:

Fig. 43 Academic Speech Courses Per Elementary Teacher

Number of Courses Taken:	None	1	2	3	4
Number of Teachers:	5	11	8	3	1

b. These teachers report the following titles for the university speech courses taken: (1) Beginning or Fundamentals of Speech, (2) Speech Correction, (3) Interpretive Reading, (4) Voice and Diction, and (5) Phonetics.

c. Fifty per cent of the teachers in this study could not remember the course titles, and only two teachers could remember the title or author of the speech textbook they used.

I. Speech Fright Differences according to sex, as Measured by the Ross and Sally Tests at the Holmes and Dossin Schools

Fig. 44

		Boys	Girls			Boys	Girls
Kinder-garten	High	15	7	1st-2nd Grades	High	9	4
	Low	57	36		Low	98	93
	Average	14	6		Average	6	4
		N=86	N=76			N=113	101
	Total N=162				Total N=214		
3rd-4th Grades	High	15	12	5th-6th Grades	High	37	35
	Low	121	134		Low	73	65
	Average	5	4		Average	23	21
		N=141	150			N=133	121
	Total N=291				Total N=254		

Analysis of Differences:

(1) Between the boys and girls of the 5th-6th grades, a chi square of .039 is not significant.

(2) Between the boys and girls of the 3rd-4th grades, a chi square of .825 is not significant.

(3) Between the boys and girls of the 1st-2nd grades, a chi square of 1.733 is not significant.

(4) Between the boys and girls in the kindergarten classes, a chi square of 5.802 indicates a significant difference at the 10 per cent level.

(5) The overall chi square of this table is 2.090 which is not significant.

2. Speech Fright Differences according to sex in the Sixth Grade, as Measured by Introspective Tests and Researchers' Observations at Herman School

Fig. 45

Researchers' Observations

	Boys	Girls
High	13	19
Low	3	4
Average	16	11
	N=32	N=34
	Total	N=66

Sally Test

	Boys	Girls
High	12	13
Low	14	16
Average	6	5
	N=32	N=34
	Total	N=66

Direct (Car)

	Boys	Girls
High	8	11
Low	6	10
Average	18	13
	N=32	N=34
	Total	N=66

Indirect (Puppet)

	Boys	Girls
High	5	10
Low	10	7
Average	17	17
	N=32	N=34
	Total	N=66

Analysis of Differences:

(1) The Researchers' Observation of differences between the boys and girls on the 6th grade level indicates a chi square of 2.118 which is not significant.

(2) The Sally Test results between the boys and girls on the 6th grade level indicate a chi square of .224, which is not significant.

(3) The Direct (Car) Test between the boys and girls on the 6th grade level indicates a chi square of 2.275, which is not significant.

(4) The Indirect (Puppet) Test between the boys and girls on the 6th grade level indicates a chi square of 2.203, which is not significant.

(5) The overall chi square of this table is 2.964 which is not significant.

3. Speech Fright Differences according to sex in the Fourth Grade, as Measured by Introspective Tests and Researchers' Observations at Herman School

Fig. 46

Researchers' Observations

	Boys	Girls
High	16	11
Low	8	8
Average	10	12
	N=34	N=31
	Total	N=65

Sally Test

	Boys	Girls
High	3	2
Low	26	29
Average	5	0
	N=34	N=31
	Total	N=65

Direct (Car)

	Boys	Girls
High	8	7
Low	15	13
Average	11	11
	N=34	N=31
	Total	N=65

Indirect (Puppet)

	Boys	Girls
High	8	8
Low	11	16
Average	15	7
	N=34	N=31
	Total	N=65

Analysis of Differences:

(1) The Researchers' Observations between the boys and girls on the 4th grade level indicates a chi square of .984, which is not significant.

(2) The Sally Test between the boys and girls on the 4th grade level indicates a chi square of 5.313, which indicates a significant difference at the 10 per cent level.

(3) The Direct (Car) Test between the boys and girls on the 4th grade level indicates a chi square of .075, which is not significant.

(4) The Indirect (Puppet) Test between the boys and girls on the fourth grade level indicates a chi square of 3.696, which is not significant.

(5) The overall chi square of this table is 2.218 which is not significant.

4. Speech Fright Differences according to sex in the Second Grade, as Measured by Introspective Tests and Researchers' Observations at Herman School

Analysis of Differences:

(1) The Researchers' Observation between the boys and girls on the second grade level indicates a chi square of .786, which is not significant.

(2) The Sally Test between the boys and girls on the second grade level indicates a chi square of 4.482, which is not significant.

(3) The Direct (Car) Test between the boys and girls on the second grade level indicates a chi square of 11.666, which indicates a significant difference at the 1 per cent level.

(4) The Indirect (Puppet) Test between the boys and girls on the second grade level indicates a chi square of .985, which is not significant.

(5) The overall chi square of this table is 1.876 is not significant.

Fig. 47

Researchers' Observations

	Boys	Girls
High	14	16
Low	7	5
Average	8	11
	N=29	N=32
	Total	N=61

Sally Test

	Boys	Girls
High	5	1
Low	23	31
Average	1	0
	N=29	N=32
	Total	N=61

Direct (Car)

	Boys	Girls
High	9	1
Low	18	21
Average	2	10
	N=29	N=32
	Total	N=61

Indirect (Puppet)

	Boys	Girls
High	4	7
Low	14	16
Average	11	9
	N=29	N=32
	Total	N=61

5. Speech Fright Differences according to sex in the Kindergarten, as Measured by Introspective Tests and Researchers' Observations at the Herman School

Analysis of Differences:

(1) The Researchers' Observations between the boys and girls on the kindergarten level indicates a chi square of 2.633, which is not significant.

(2) The Sally Test between the boys and girls on the kindergarten level indicates a chi square of .389, which is not significant.

(3) The Direct (Car) Test between the boys and girls on the kindergarten level indicates a chi square of 3.511, which is not significant.

(4) The Indirect (Puppet) Test between the boys and girls on the kindergarten level indicates a chi square of 2.741, which is not significant.

(5) The overall chi square of this table is 1.420 which is not significant.

Fig. 48

Researchers' Observations

	Boys	Girls
High	12	14
Low	6	4
Average	5	12
	N=23	N=30
	Total	N=53

Sally Test

	Boys	Girls
High	1	6
Low	18	20
Average	4	4
	N=23	N=30
	Total	N=53

Direct (Car)

	Boys	Girls
High	4	7
Low	9	17
Average	10	6
	N=23	N=30
	Total	N=53

Indirect (Puppet)

	Boys	Girls
High	8	11
Low	6	13
Average	9	6
	N=23	N=30
	Total	N=53

J. Analysis of Mean Fright Scores

An analysis of differences between the mean scores of the sixth grade with the second and fourth grades, in terms of speech fright from the introspective test of

Direct Questioning (Car Test) indicated a t score of .95 between the sixth and fourth grades, which was not significant. Since the chi squares showed great significance in the breakdown of high, low, and average speech fright in the Direct Questioning, and the means averaged out to show no significance, the t test even with added data does not appear to be an appropriate measure for this analysis. This was also the conclusion of the pilot study.

CHAPTER V

Summary, Conclusions, and Implications

A. Summary

1. Level and Extent of Speech Fright by Grade
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2. Level and Extent of Speech Ability by Grade
   - a. Observation of Speech Ability
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- B. Conclusions
  - 1. General Conclusions Concerning Basic Questions
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    - f. Do Children in the Lower Economic Settings have More Speech Fright than Children in the Higher Economic Settings?
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2. Discussion of Findings
    a. Speech Fright
    b. Speech Ability
    c. Speech Readiness
    d. Value of Tests for the Elementary School Teacher

C. Implications

CHAPTER V

Summary, Conclusions, and Implications

A. Summary

1. Level and Extent of Speech Fright by Grade

a. Observation of Speech Fright

1) In general, across the grades, high, low, and average speech fright, as shown by researchers, observation _do not vary_ significantly among the grades. In fact, as Figure 2, "Frequency of Speech Fright by Grades," indicates, they are similarly distributed among the grades. However, it should be pointed out that, at the 10 per cent level of statistical significance, the 4th grade and 6th grade do vary--_with the 4th grade having the lower speech fright_.

2) In general, across the grades, high, low, and average speech fright, as shown by the introspective tests _do vary_ significantly between the

higher and lower grades,[108] but not generally among the lower grades.

a) Direct Questioning. The introspective test of direct questioning indicates a statistical difference as shown by chi squares between the 6th and 4th grades, between the 6th grade and 2nd grades, and between the 6th grade and kindergarten. The 6th grade indicates the most speech fright. Between the 4th and 2nd grades, the statistical difference is less (10 per cent level of confidence). The 4th grade has less speech fright than the 6th grade, but more than the lower grades. This introspective test shows no significant difference between the 4th grade and kindergarten, and between the 2nd grade and kindergarten.

b) Indirect Questioning. The introspective test of indirect questioning indicates a statistical difference as shown by chi squares between the 6th and 2nd grades and between the 6th grade and kindergarten. It should be pointed out that the 4th and 6th grades do differ but only at the 10 per cent level of statistical significance. These differences again indicate that the higher grades have more speech fright. No significant difference is indicated between the 4th and 2nd grades, and between the 4th grade and kindergarten. It should be pointed out that between 2nd grade and kindergarten there is a statistical difference at the 10 per cent level. Here, however, it is the kindergarten which indicates more speech fright.

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[108] All findings that are reported as statistically significant are inside the 5 per cent level of confidence.

c) Paper-and-Pencil Tests (Ross and Sally) Administered by Researchers at the Herman Elementary School. These introspective tests when administered by researchers, indicate a statistical difference, as shown by chi squares, between the 6th and 4th grades, between the 6th and 2nd grades, and between the 6th grade and kindergarten. Here, the 6th grade indicates the most speech fright. But between the 2nd grade and kindergarten, which also indicate a significant difference, the lower grade (kindergarten) indicates higher speech fright. This test indicates no significant difference between the 4th and 2nd grades, and between the 4th grade and kindergarten.

d) Teacher-Administered Tests (Ross and Sally) at the Holmes and Dossin Elementary Schools. The same introspective tests, when administered by teachers, indicate a statistical difference as shown by chi squares, between combined (5th-6th) and (3rd-4th) grades; between combined (5th-6th) and (1st-2nd) grades; between combined (5th-6th) grades and kindergarten; between combined (3rd-4th) grades and kindergarten; and between combined (1st-2nd) grades and kindergarten. The 6th grade indicates the most speech fright. These tests indicate no significant difference between combined (3rd-4th) grades and combined (1st-2nd) grades.

b. Teachers' Report with Respect to Speech Fright

In general, across the grades, high, low, and average speech fright as reported by the teachers do vary significantly among the grades. Statistical differences exist between the 6th and 4th grades, between the 6th and 2nd grades, between the 6th grade and kindergarten, between the 4th grade and kindergarten, and between the 2nd grade and kindergarten. The 6th grade indicates the most speech fright. There is no significant difference between the 4th and 2nd grades.

2. Level and Extent of Speech Ability by Grade

a. Observation of Speech Ability

In general, across the grades, poor, good, and average speech ability, as shown by researchers, observation does not vary significantly among the grades. The only statistical significance that does exist is between the 4th grade and kindergarten. The kindergarten indicates poorer speaking ability than the 4th grade. Between the 6th grade and kindergarten, the significant difference is at the 10 per cent level. Again, the kindergarten indicates poorer speaking ability than the 6th grade. The researchers indicate that about 1/4 of these classes have poor ability, about 1/4 good ability, and the remaining majority average ability. The chi squares also reflect this distribution among the grades.

b. Teachers' Report of Speech Ability

In general, across the grades, poor, good and average speech ability, as reported by teachers, statistically differs as shown by chi squares through all the grades save one. Between the 6th and 2nd grades, no significant difference exists. Where there are significant differences, the 4th grade indicates the poorest speech ability, kindergarten the best speech ability, and the 6th grade average ability.

3. The Relationship of Speech Ability to Speech Fright

In general, across the grades, poor speech ability does not appear to be predictive of speech fright or vice versa, as shown by no statistically significant differences in chi square scores between speech fright, as shown by researchers and introspective tests, and poor speech ability, as shown by researchers. However, it should be pointed out that, in the kindergarten at the 10 per cent level, high speech fright, as shown by observation, is related to poor speech ability as shown by observation. In the kindergarten, the higher the fright, the lower the level of speech ability as rated by the observers.

4. Comparison of Speech Fright and Speech Ability as Rated by Teachers and Researchers[109]

a. Speech Fright Comparison Between Teacher Ratings and Researcher Ratings

1) Across the grades, teacher ratings differ significantly, as shown by chi squares from the researchers' ratings on speech fright. The most significant differences are found in the 6th grade and kindergarten. The researchers observe a greater

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[109] See Appendix page 217 for table showing derivation of percentages using data from the main study.

percentage of high speech fright than do the teachers. The teachers rate 22.4 per cent of the children as having high speech fright and indicate that the greater number of these children are present in the 2nd and 4th grades. The researchers rate 46.9 per cent of the children as having high speech fright on observation and indicate that these children are fairly evenly distributed among the grades.

2) The paper-and-pencil tests as administered by the teachers and the researchers do not indicate significantly varying results. Thus, it would appear that they can be administered by teachers or researchers with equal effectiveness.

3) Neither teachers' nor researchers' ratings agree in any significant way with introspective test results.

4) Neither teachers; nor researchers agree in any significant way with each other.

b. Speech Ability Comparison Between Teacher Ratings and Researcher Ratings

Teacher ratings show a statistically significant difference at the 4th grade level, the 2nd grade level, and the kindergarten level, from the researcher ratings of speech ability. In the 4th grade, the teachers observe more poor speaking ability than do the researchers. In the 2nd grade, researchers observe more poor speaking ability than do the teachers and in kindergarten, the researchers observe more poor speaking ability than do the teachers. In the 6th grade, there is no significant difference between teacher and researcher ratings. The teachers rate 16.7 per cent of the elementary school children as having poor speaking ability and indicate that the greater number of these children are present in the 4th and 6th grades. The researchers rate 22.0 per cent of the children as having poor speaking ability and indicate the greater number of these children are present in the kindergarten and 2nd grade.

5. Predictive Value of the Introspective Tests

a. For Researchers. Observations[110]

1) Direct questioning (high, low, and average speech fright) yields the most agreement with this researchers' observations.

- a) Direct questioning's predictive value on the grade levels:
  - (1) On the 6th grade level, its agreement with researchers is 45.4 per cent.
  - (2) On the 4th grade level, its agreement with researchers is 44.6 per cent.
  - (3) On the 2nd grade level, its agreement with researcers is 37.7 oer cent.
  - (4) On the kindergarten level, its agreement with researchers is 33.9 per cent.

2) The introspective test which yield the nearest agreement with researchers' observation of only high speech fright, varies with each grade:

- (1) In the 6th grade, the Ross Test yields a 46.8 per cent agreement with researcher observations.
- (2) In the 4th grade, the direct

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[110] See Appendix page 224 for table showing deviation of percentages using data from the main study.

questioning yields a 33.3 per cent agreement with the researchers.

(3) In the 2nd grade, the direct questioning yield a 26.6 per cent agreement with researchers observations.

(4) In kindergarten, the indirect questioning yields 31.7 per cent agreement with researcher observations.

Therefore, the predictive value of the tests is low

b. For Teachers' Reports:[111]

1) The introspective test result which has the nearest agreement with the teachers' reports of high, low, and average speech fright, varies with each grade:

(1) In the 6th grade, the indirect questioning yields a 45.4 per cent agreement with teachers' reports.

(2) In the 4th grade, the direct questioning yields a 46.1 per cent agreement with teachers' reports.

(3) In the 2nd grade, the Sally Test yields a 55.7 per cent agreement with teachers' reports.

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[111] See Appendix page 224 for table showing derivation of percentages using data from the main study.

(4) In kindergarten, the Sally Test, yields a 60.3 per cent agreement with teachers' report.

Therefore, the predictive value of these tests is higher for the teachers than for the researchers, but in general is still low.

2) The introspective test which has the nearest agreement with the teachers' reports on only high speech fright varies with each grades:

(1) In the 6th grade, the indirect questioning yields a 37.5 per cent agreement with teachers' reports.

(2) In the 4th grade, the direct questioning yields a 42.8 per cent agreement with teachers' reports.

(3) In the 2nd grade, the indirect questioning yields a 25.0 per cent agreement with teachers' reports.

(4) In kindergarten, the three introspective tests yield a 33.3 per cent agreement with teachers' reports.

Therefore, the predictive value of the tests for teachers' report is also low.

6. Socio-economic Differences in Speech Fright Among The Schools in this Study, as Shown by the Paper-and-Pencil Test Results (Ross and Sally)

a. By School (Sample Population = Dossin 467, Holmes 454, Herman 245, Total 1,166)

1) There is a statistically significant difference, with respect to speech fright, between the Holmes Elementary, situated in a lower class neighborhood, and the Dossin Elementary School. Children at the Holmes School indicate more speech fright.

2) There is a statistically significant difference, with respect to speech fright, between the Herman Elementary School, situated in a lower class neighborhood, and the Dossin Elementary School. Children at the Herman School indicate more speech fright.

3) There is no significant difference with respect to speech fright between the Herman and Holmes Elementary Schools. Both of these schools are situated in similar socio-economic settings.

Therefore, more speech fright appears to exist in the lower economic groupings.

b. By Grades

1) Between the Dossin and Holmes Schools, there are significant differences with regard to speech fright between the combined (5th-6th) grades, as well as between the combined (3rd-4th) grades. There are no significant differences at the other grade levels.

2) Between the Dossin and Herman Schools, there are significant differences with regard to speech fright between the combined (5th-6th) grades, as well as between the combined (3rd-4th) grades. There are no significant differences at the other grade levels.

3) Careful examination of the Raw Scores among the grades at the Holmes and Herman Schools reveals that grade level comparisons of speech fright between the two schools would be consistent with the school comparisons of speech fright which indicate no statistical significance.

7. Teacher Attitudes with Respect to Speech Ability, Speech Fright, Speech Curriculum, and Teacher Background, as Reported on a Questionnaire Form

a. Speech Fright

The primary teachers feel that speech fright should not be discussed in their grades.

The higher elementary grades generally do discuss speech fright. The higher grade teachers feel it more appropriate to discuss speech fright than do the primary grade teachers.

b. Speech Ability

Seventeen of 28 teachers perceive speech ability in the broader sense of thought, language, voice, and action. The remaining eleven teachers perceive it in the narrower sense of correct English or good articulation. It is interesting to note that, in the latter instance, most of the teachers are from the primary grades.

c. Speech in the Elementary Curriculum

Teachers generally report that speech in the elementary school should be part and parcel of the curriculum, rather than taught separately.

d. Teacher Background in the Area of Speech

(1) Of the 28 teachers, 5 have not taken any speech courses at the university level.

(2) Of the 28 teachers, 11 have taken only 1 speech course at the university level.

(3) Of the 28 teachers, 8 have taken 2 speech courses at the university level.

(4) Of the 28 teachers, 3 have taken 3 speech courses at the university level.

(5) Of the 28 teachers, only 1 has taken 4 speech courses at the university level.

(6) Few of these teachers could remember the titles of textbooks used, and only half of them could remember the title of the course, or courses, taken.

Therefore, in general, it appears that the majority of teachers in this study are aware of the broader values intrinsic in good speech and do try to deal sympathetically with speech fright in their elementary classes.

8. Sex Differences in Speech Fright

In general, as shown by researchers' observations and the introspective tests, there are no speech fright differences according to sex at any grade level. It should be pointed out, however, that there was one statistically significant difference in speech fright between the boys and girls on the 2nd grade level, as measured by the direct questioning test. In this particular test, the boys showed a high degree of speech fright, whereas the girls had more average scores.

B. Conclusions

1. General Conclusions Concerning Basic Questions

a. How Frequent is the Phenomenon of Speech Fright at the Elementary School Level?

According to the introspective test results, and depending on the grade, between 15 and 25 per cent of the elementary school children in this study appear to reveal considerable concern about speech fright. In the upper elementary grades, the percentage is closer to 25 per cent;

in the primary grades, the percentage is closer to 15 per cent. The Direct and Indirect Questioning show a higher percentage of speech fright than do the paper-and-pencil tests.

The researchers from their observations report a much greater amount of high speech fright than the children report in the introspective tests. The researchers observe 46.9 per cent of the children exhibited what they consider to be signs of high speech fright.[112] Each of the grades that are observed have about the same percentage of children who show a high degree of speech fright.

The teachers' reports indicate about the same amount of high speech fright as is reported by the children on the introspective tests. The teachers report 22.4 per cent of the children as exhibiting high speech fright in the elementary schools. Most of this 22.4 per cent is accounted for in the second and fourth grades. It should be emphasized again that neither the teachers' nor the researchers' observations of speech fright significantly correlate with the children's introspective reports about speech fright.

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[112] See appendix page 222 for tables indicating how these percentages were derived.

4

b. Is Speech Fright Related to Poor Speech Ability?

In this study Speech fright is not found to correlate positively with poor speech ability. In general, across the grades, speech fright does not appear to be predictive of poor speech ability or vice versa, as shown by no statistically significant differences in chi square scores between speech fright, as shown by researchers and introspective tests, and poor speech ability, as shown by researchers. Only in the kindergarten at the 10 per cent level, is high speech fright, as shown by observation, related to poor speech ability, as shown by observation. Thus, in the kindergarten there is some tendency for the child with the higher speech fright to have a lower level of speech ability as rated by the observers.

Sarason reports several psychological studies with grade school children, some of which show positive correlation between anxiety, and some which do not. He concludes that the performance involved might be an important variable.[113]

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[113] Sarason et al. ,p. 185-188.

Perhaps anxiety is not always negatively correlated with speech performance.

c. What Are the Teachers' Attitudes With Respect to Speech Fright?

The upper elementary grade teachers indicate generally that they are aware of this phenomenon of speech fright and discuss it directly with their pupils. The lower grade teachers indicate generally that they are not aware of any great intensity of speech fright and therefore they do not directly deal with the childrens' speech fright, nor do they feel the need to do so. The latter idea is mainly expressed by kindergarten and first grade teachers.

The introspective tests indicate that kindergarteners and first graders reveal less high speech fright than the upper elementary grade students; nonetheless, the researchers observe as much high speech fright in kindergarten as they do in the sixth grade. Why, from the researchers' point of view, do the kindergarten teachers perceive less speech fright than the researchers? In communicating with several of the primary grade teachers concerning this question, it is found that they feel small children usually are not self-conscious public speakers. This attitude might influence their not recognizing speech fright. Many of the primary grade teachers feel that speech training is merely training in pronunciation and does not include training in thinking and feeling.

d. How Reliably Predictive Are the Introspective Tests?

The introspective tests have a low predictive value as compared with observed speech fright. At face value, the tests do indicate the child's speech attitude concerning speech-making. In this way the introspective tests have practical value and indicate to the teacher those children who are considerably concerned by the prospect of speaking before the class.

e. Which Introspective Test Judged By Its Results Seems Most Sensitive At The Respective Grade Levels?

1. The introspective test which shows the closest correlation with the researchers' observations of high, low, and average speech fright is Direct Questioning (Car Test).

2. The introspective test which reveals the greatest amount of speech fright is Direct Questioning (Car Test).

3. The introspective test which shows the closest correlation with the researchers' observations of high speech fright varies at each grade level: for sixth grade, the Ross Test; for fourth and second grade, the Direct Questioning (Car Test); for kindergarten, the Indirect Questioning (Puppet) Test).

4. The introspective test which shows the closest correlation with the teachers' reports of high speech fright varies at each grade level: for sixth grade, the Indirect Questioning (Puppet Test); for fourth grade, the Direct Questioning (Car Test); for second grade, the Indirect Questioning (Puppet Test); for kindergarten, all three tests (Sally Test, Direct Questioning, and Indirect Questioning).

f. Do Children In The Lower Economic Settings Have More Speech Fright Than Children In Higher Economic Settings?

In the schools here studied, at the third, fourth, fifth and sixth grade levels, statistically significant evidence is found that children in the lower economic settings indicate more speech fright than children in high economic settings. It is interesting to note that such statistically significant evidence is not found for the kindergarten, first, and second grades.

g. Do The Researchers' Ratings and Introspective Test Results Indicate Speech Fright Differences According To Sex?

In this study, chi squares on the children's scores in all tests and at all grade levels are not statistically significant, except for Direct Questioning (Car Test) at the second grade level. Therefore, there are no conclusive indications concerning any presence or absence of speech fright differences according to sex.

Sarason et al., in their psychological studies with grade school children have found that girls usually report more general anxiety than boys.[114]

2. Discussion of Findings

This study sought to investigate speech fright in the elementary school and its relationship to speech ability and speech readiness. It also succeeded in devising various measures for speech fright which could be of value to the elementary teacher. It has found that at least 20 per cent of the children are considerably concerned by speech fright. No apparent relationship between speech fright and speech ability was found and the evidence in the study does not indicate that a child may be more ready to speak at any specific grade level.

a. Speech Fright

There are enough children in the elementary schools who are considerably concerned by speech fright to warrant the speech educators' concern. The child with speech fright appears to fall into one of two categories: (1) the child who appears painfully shy and behaviorally indicates this, and

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[114] Sarason et al., p. 253.

(2) the child who indicates speech fright on the introspective tests but does not show this behaviorally.

The child who behaviorally indicates his shyness or his vulnerability when speaking in front of the class seems literally to plead with his eyes for some kind of help. When this child sits down, he appears uneasy. The child might verbalize his need for reassurance to his peers, "That was really good, wasn't it?" or "That was really bad, wasn't it?" The classmates around him are usually oblivious to his discomfort. It is at this crucial moment, when the child feels the most inadequate about his speech-making, that the grade school teacher may need to be psychologically supportive.

The researchers observed some children as having low speech fright in the speaking situation who, in the interview situation, indicated high speech fright and further verbalized a total dislike for getting up in front of the class to speak. This child who did not show his intense speech fright but nevertheless indicated it on the introspective tests might also need reassurance by the teacher.

b. Speech Ability

There are several possible explanations why this study indicates that no apparent relationship exists between speech fright and poor speaking ability. Taking the evidence at face value, the children who have high speech fright do not necessarily have poor speaking ability. If this is not the case, then perhaps one reason for these results would be that children who have poor speech ability do not wish to disclose their high speech fright on the introspective tests. Another reason for these results might be the statistical procedure used for combining the good and average speech ability to determine whether they differ significantly with speech fright, it is possible that less emphasis than is warranted has been given to average speech ability and its possible relationship to speech fright.

c. Speech Readiness

Early in this study it was surmised that at certain grade levels the child may be more ready to speak in front of an audience. The evidence of the researchers' observations in this study does not appear to support that hypothesis. From the researchers' observations it would appear that some children at all levels are ready to speak, while others are concerned by speech fright or self-concious about poor speech ability. Therefore, a speech readiness program should be adapted to the child, not the grade. Because of the uneven pattern toward speaking attitudes,[115] perhaps a greater concentration of successful speech and communication experiences might be promoted at the primary level to reinforce pleasant associations with the speaking situation and reduce later tendencies to develop speech fright.

Teachers have stated to the researchers that children in the elementary school should not be made to face an audience and that speech making should be limited largely to off-hand or spontaneous self-expression. This may not be realistic since the study shows evidence that about 1/3 of the total sample indicate a liking for public speaking. These children may find it rewarding to be better prepared. This information should be taken into consideration when formulating general attitudes toward speech readiness at the elementary level.

d. Value of Introspective Tests for the Elementary School Teacher

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[115] It should be recalled that the introspective tests indicated more speech fears at the upper grade levels.

If the elementary school teacher used these introspective tests they would help her to recognize those children who are worried about speech fright. She would then be able to give them special supportive attention. These tests might also help the teachers to overcome possible resistance toward accepting and evaluating speech fright.

3. Implications

If the speech researcher is to make an effective contribution in the area of speech fright at the elementary school level, the following further investigations might prove fruitful:

1. It may be important and relevant to know more about the child who is considerably concerned by speech fright, in terms of intelligence, listening habits, creativity, general anxiety, emotional maturity, and physical maturity. It might prove productive to conduct follow-up studies of this child to discover whether the same patterns of speech fright continue for him at the high school and college level.

2. The literature indicates that girls usually reflect more general anxiety than boys. As Sarason points out,

this could be a cultural determinant, inasmuch as girls feel freer to admit their anxiety.[116] The girls in this study did not reflect greater speech fright than the boys. It would be interesting to explore further discrepancy between the study and the literature.[117]

3. It might be important to determine why teachers differed significantly with the researchers observing speech fright in the classroom. Was the difference peculiar to this study, or are elementary school teachers (particularly those in the primary grades) not receptive to a reality of speech fright within their grades? It is probable that the teachers and researchers perceive speech fright from different indices or criteria. For example, the teachers derived their judgment from the overall aspects that come from understanding each child, rather than from the small amount of information obtained from the speech occasion.

4. The study showed that there was no significant difference in the frequency of speech fright among grade

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[116] Sarason, _op_. _cit_., (above, note 12) p. 253

[117] It is possible that speech fright is simply one aspect of general anxiety.

levels as measured by the researchers' observation. Through longitudinal studies, it would be important to note whether it is the same children who continue to have speech fright throughout the grades, or whether some children outgrow their fears, while others acquire them.

5. It would be important to understand why children in the lower economic settings, particularly in the higher elementary grades, indicate more speech fright than those children at the same grade level in the higher economic settings. Perhaps self-esteem tests could be devised to reveal a difference. If self-esteem needs are the underlying reason for this phenomenon then perhaps what is needed is a special speech curriculum adaptation for these schools.

6. It would also be important to understand why children of the lower economic setting in the primary grades _do not_ vary from the children in the higher economic setting with respect to speech fright, until the third grade. Since this seems to be the critical transition period, an answer here could be very important.

7. The role of speech communication training in the very early grades of socially, economically or culturally deprived children appears from this study to be a critical

area for research. Specific information obtained from the studies suggested above (number 5 and number 6) might be helpful in an investigation of this role.

8. The study indicated no significant difference in the frequency of poor, average, and good speech ability among grade levels as reported by the researchers' observations. Through longitudinal studies, it would be important to note whether each child retains the same degree of speech ability throughout grade school, high school and college.

9. The pilot study showed that there were some discrepancies among grades in the development of voice, language, action, and thought ability, as indicated by the researchers' observation.[118] Further study of this phenomenon would help in obtaining more specific speech norms for the elementary school.

10. This study did not investigate the sex differences that might be present in speech ability. Further understanding of speech ability would be of help to teachers in

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[118] See pg 216 in appendix for this breakdown

working with children and their speech problems.

11. It would be interesting to discover whether teachers who had more formal speech training at the university level are better able to deal with speech fright. It should be recalled that elementary school teachers in this study had on the average taken only two speech courses. Are teachers with more speech training more effective in helping the child to speech readiness?

12. It would be interesting to experiment with seminars for elementary school teachers, in which the central study is speech fright in the elementary grades. Various approaches for dealing with speech firght.. such as Garrett's with college students,[119] might be considered for the elementary level. Lewin's idea of permitting the child to set his own aspirational level might be applied to overcoming fright.[120] Sarason's idea, that the highly anxious child has heightened dependecy needs and that the teacher should not emotionally "withdraw" from such a child,[121] might be

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[119] Garrett, *op. cit.* (above, note 75), p. 144.

[120] Lewin, *op. cit.* (above note 19), p. 138

[121] Sarason, *op. cit.* (above note 12), p. 272

thought out and experimentally applied to the child who is concerned by speech fright.

13. It would be important to discover whether the children feel less speech fright in those classes where the teacher has a warm personality and creates an atmosphere which encourages fuller self-expression.

14. Some of the teachers indicate that the children in their classes have an opportunity to speak at least once a day before the class; others indicate that the children speak in front of the class about once a week. It would be important to know whether there is more speech fright in those classes where the child has less opportunity to speak, or vice versa.

15. The elementary school teachers indicated in the questionnaire that they integrate speech activities with their class curriculum. Perhaps experimentation with a more direct approach to public speaking, such as that used at the college freshamn level, might yield positive results. These results could be used by the teacher in addition to what she is already doing.[122]

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[122] In conversation between Dr. Rupert Cortright and this researcher on July 12, 1966, Dr. Cortright reflected that

If the speech researcher is going to be an important contributor to the elementary school teacher in terms of speech education he must seek the answers to these questions.

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essential to any speech readiness program is the process of motivating the child to want to express his own ideas and feelings. Speech activities such as creative drama, discussions, story telling, puppetry and choral reading might be instrumental in aiding this process.

APPENDIX

APPENDIX

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D

Name ______________________________ Grade ________ Sex ______

Teacher ______________________________ Date ________________

School ______________________________ Age ____________

Speech Proficiency and Speech Anxiety Rating Scale
please circle

Voice (in terms of expressiveness and strength)

1 ____ 2 ____ 3 ____ 4 ____ 5 ________

Language (in terms of complete sentences and appropriate choice of words)

1 ____ 2 ____ 3 ____ 4 ____ 5

Thought (in terms of organized thinking e.g. abstract to concrete, etc.)

1 ____ 2 ____ 3 ____ 4 ____ 5

Action (in terms of expressive and appropriate bodily communication)

1 ____ 2 ____ 3 ____ 4 ____ 5

Anxiety (in terms of observed behavior)

1 ____ 2 ____ 3 ____ 4 ____ 5

Name____________________ Grade__________ Sex__________

Teacher____________________ Date____________________

School______________________________ Age__________

Speech Proficiency and Speech Anxiety

Rating Scales

(In terms of expressiveness and strength)

Voice 1 2 3 4 5

(In terms of complete sentences and correct word choice)

Language 1 2 3 4 5

(In terms of organized thinking e.g. abstract to concrete)

Thought 1 2 3 4 5

(In terms of expressive and appropriate bodily communication)

Action 1 2 3 4 5

(In terms of observed behavior)

Anxiety 1 2 3 4 5

____

Car and Puppet Interview

Anxiety (How does the doll feel?) Response____________________

(Indirect) 1 2 3 4 5

Anxiety (How do you feel?) Response____________________

(Direct) 1 2 3 4 5

Comment:

ROSS - OSBORNE SPEECH ANXIETY INVENTORY

(Adapted from the research of Howard Gilkenson)
Wayne State University - 1962
College of Liberal Arts
Department of Speech

Name: ______________________________ Instructor: ____________________

Date: ____________________ Sex: ______________ Age: ______________

CHECK ONLY THOSE STATEMENTS WHICH YOU FEEL APPLY TO YOU TO AN ABNORMAL OR EXTRAORDINARY DEGREE.

____ 1. Audiences seem bored when I speak.
____ 2. I feel dazed when speaking.
____ 3. I am continually afraid of making some embarrassing or silly slip of the tongue.
____ 4. My face feels frozen while speaking.
____ 5. I have a deep sense of personal worthlessness while facing an audience.
____ 6. Owing to fear, I cannot think clearly on my feet.
____ 7. While preparing my speech I am in a constant state of anxiety.
____ 8. I feel exhausted after addressing a group.
____ 9. My hands tremble when I try to handle objects on the platform.
____ 10. I am almost overwhelmed by a desire to escape.
____ 11. I am in constant fear of forgetting my speech.
____ 12. I dislike to use my body and voice expressively.
____ 13. I feel disgusted with myself after trying to address a group of people.
____ 14. I feel tense and stiff while speaking.
____ 15. I am so frightened that I scarcely know what I'm saying.
____ 16. I hurry while speaking to get through and out of sight.
____ 17. I prefer to have notes on the platform in case I forget what I'm saying.
____ 18. My mind becomes blank before an audience and I am scarcely able to continue.
____ 19. I particularly dread speaking before a group who opposes my point of view.
____ 20. It is difficult for me to calmly search my mind for the right word to express my thoughts.
____ 21. My voice sounds strange to me when I address a group.
____ 22. My thoughts become confused and jumbled when I speak before an audience.
____ 23. I am completely demoralized when suddenly called upon to speak.
____ 24. I find it extremely difficult to look at my audience while speaking.
____ 25. I am terrified at the thought of speaking before a group of people.
____ 26. I become so confused at times that I lose the thread of my thinking.
____ 27. My posture feels strained and unnatural.
____ 28. Fear of forgetting causes me to jumble my speech at times.
____ 29. I am fearful and tense all the time while I am speaking before a group of people.
____ 30. I feel awkward.
____ 31. I am afraid the audience will discover my self-consciousness.
____ 32. I am afraid my thoughts will leave me.
____ 33. I feel confused while speaking.
____ 34. I never feel I have anything worth saying to an audience.
____ 35. I feel that I am not making a favorable impression when I speak.
____ 36. I feel depressed after addressing a group.
____ 37. I always avoid speaking in public if possible.
____ 38. I become flustered when something unexpected occurs.
____ 39. Although I talk fluently with friends I am at a loss for words on the platform.
____ 40. My voice sounds as though it belongs to someone else.
____ 41. At the conclusion of the speech I feel that I have failed.

MSA 1446

Please write Yes if it happens a whole lot.

_____I can not at all think clearly on my feet.

_____My hands tremble so much when I try to handle objects in front of the class.

_____My voice becomes so high and so loud when I am speaking.

_____I really feel like running away when I am speaking.

_____I am so afraid that I will forget my speech.

_____My body feels so tense and stiff when I am speaking in front of the class.

_____When I am speaking I can never find the right words.

_____My voice sounds so very strange to me when I speak to the class.

_____My feet and knees feel so weak when I am speaking.

_____I find it very hard to look at the class when I am speaking.

_____When I speak my voice sounds like it belongs to someone else.

_____When speaking I am so afraid that the class will find out how scared I am.

_____I can't seem to stand still when speaking.

_____When my speech is finished I feel that I have failed.

_____When I am talking in front of the class I forget what I am saying and get all mixed up.

_____My voice becomes weak and shaky when I am speaking.

_____When I speak in front of the class I am so afraid that I will really make a mistake or say something so silly.

_____I don't like to speak in class because I don't think that anyone will be interested in what I have to say.

_____I lose my voice when I begin speaking.

_____After I have given a speech in class I feel silly and unhappy when I go back to my seat.

_____My sentences get all jumbled up when I am speaking.

_____I do not mind talking to my friends but I am always so afraid that people will laugh at me when I am in front of the room.

Name______________________________ Grade____________ Age________ Sex__________

Teacher______________________________ School______________________________

[illegible]

A. Explanation of Revised Sally Test

After the pilot study was concluded, the researchers tried other variations of the 'Sally Test' at the parochial schools mentioned in this study.

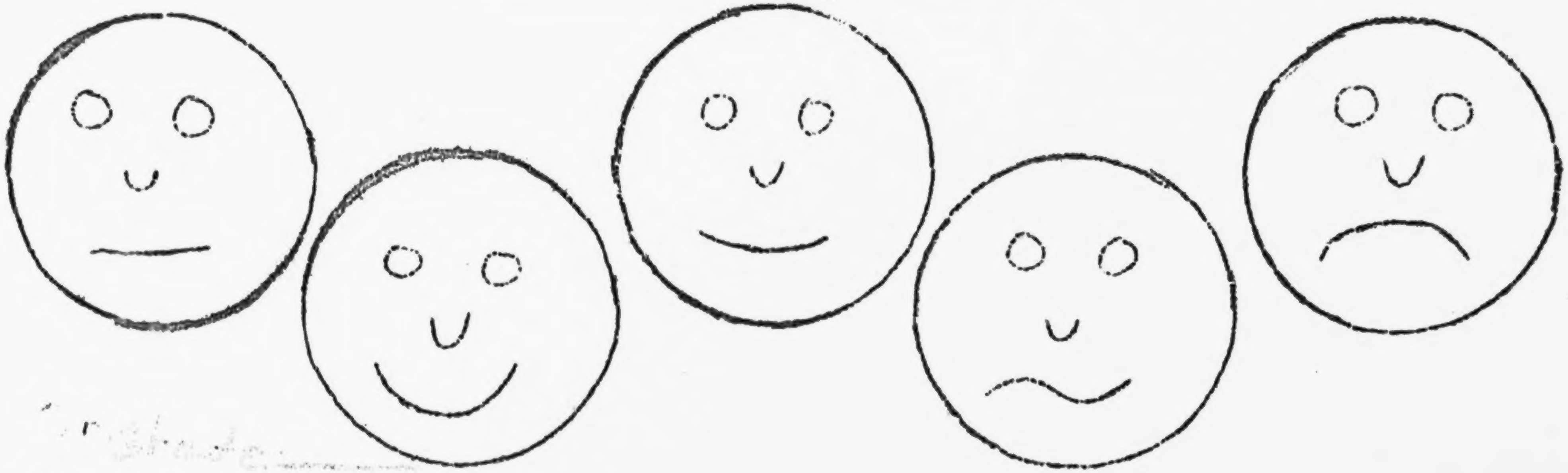
The original Sally Test was a test of faces arranged in consecutive order on a mimeographed page. The faces went in order from bad to good. A second test of faces were tried in which the faces did not range consecutively but were placed at random. A third test, showing a car moving along a race track, was constructed. This test was a paper and pencil version of a model car and race track. The forth test was a pictoral representation of how a child might feel when he talks to a class.

These four tests were tried for understanding and ease of administration. Through empirical observation the tests showing the car and showing the childrens' feelings were eliminated because of their more complex directions, and subsequent misunderstanding by the children.

Although the original test of arranged faces gave the same response in terms of quality and of being understood as the test with the rearranged faces, the latter was chosen for the main study. This decision was based upon the inference that some children might select the first face merely because it was the first face and thereby not think through their choice. The rearranged faces avoided this variable.

How do you feel when you
talk to the class?
Which face is you when you
talk to the class?

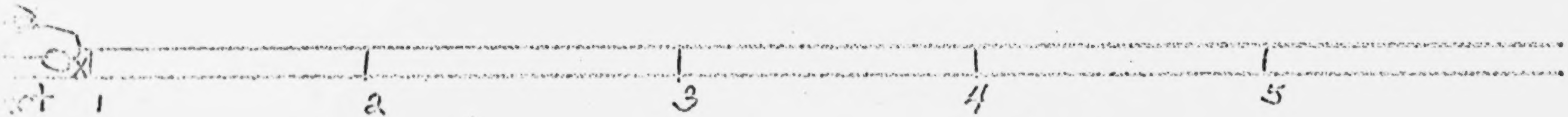
Color you



How scared do you feel when
you get up to speak?

The more you move this car the
more scared you are.

Make an X to show where you
would move this car.



me ________ ________ Grade ______ Sex ______ Age 8

cher ________ Date ______ School ______

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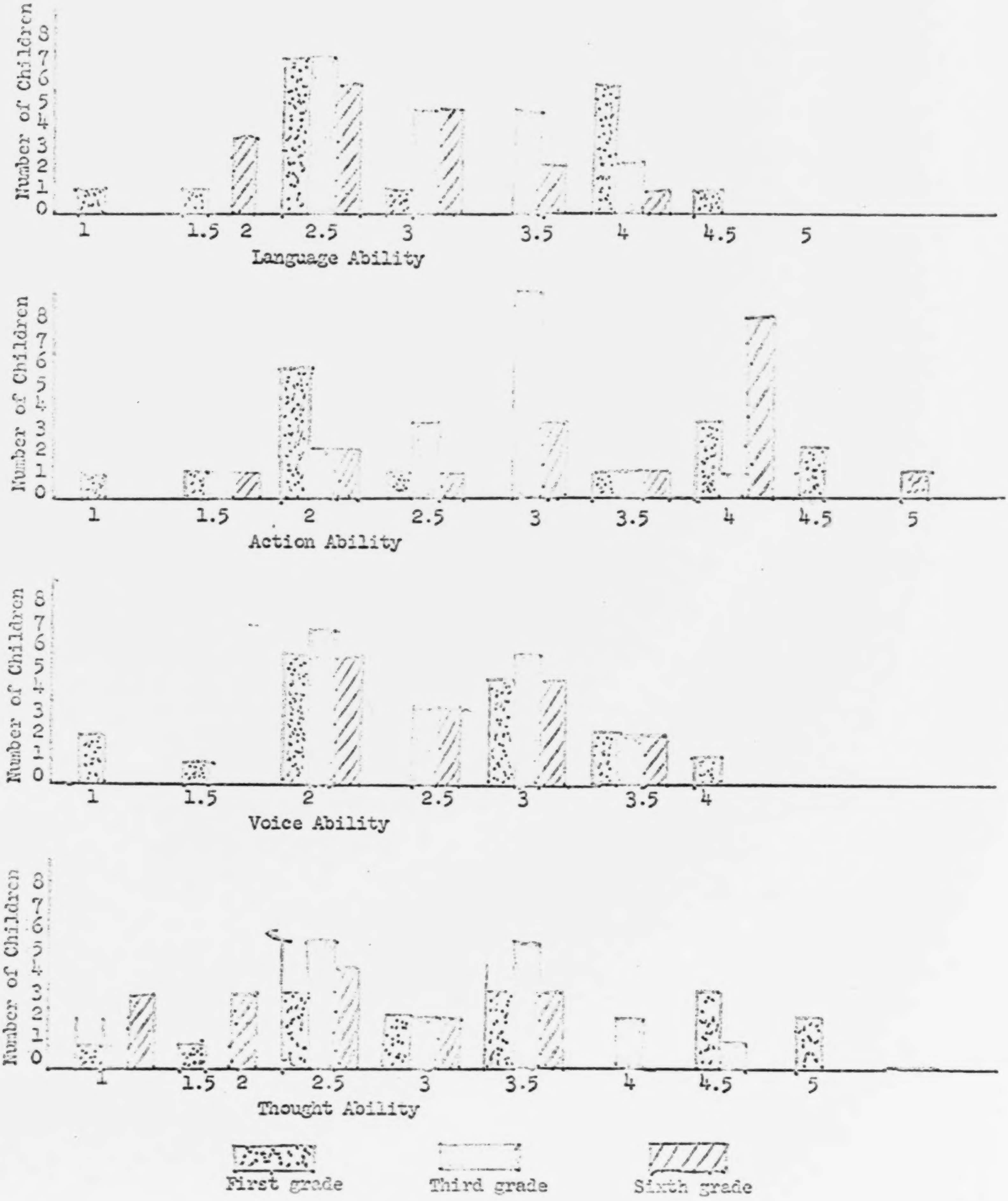
Histograms of Speech Ability (Pilot Study)



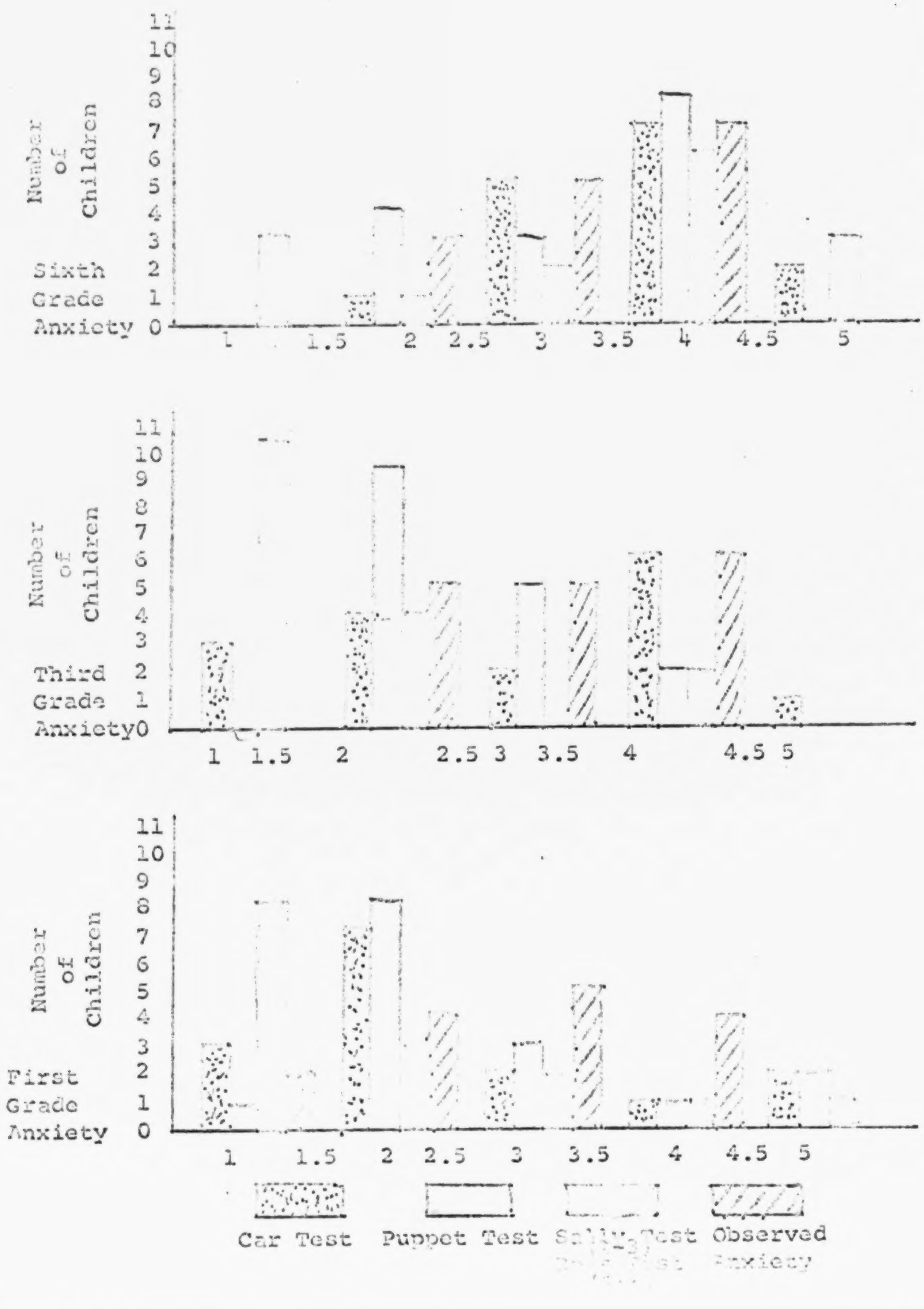
Standard Deviations on scores of Proficiency

	1st grade	3rd grade	6th grade
Thought Proficiency	= 1.047	= .746 =	= .695
Language Proficiency	= .892	= .522	= .573
Action Proficiency	= 1.244	= .4989	= .562
Voice Proficiency	= .892	= .553	= .591

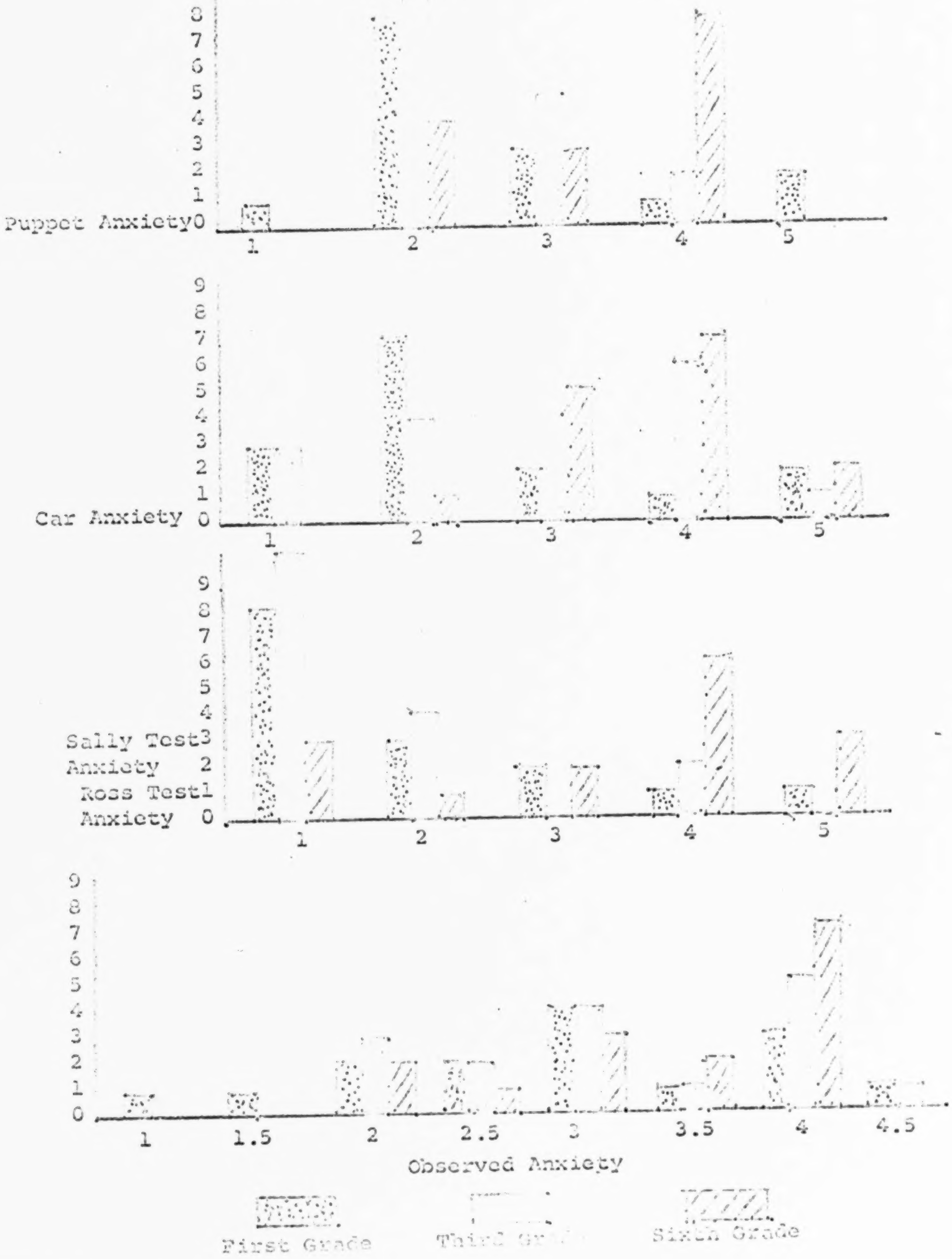
Standard Deviations on Anxiety Scores

	1st grade	3rd grade	6th grade
Mean Anxiety scale	= .9399	= .8343	= .7366
Car Anxiety	= 1.231	= 1.182	= .789
Puppet Anxiety	= 1.137	= .702	= .854
Sally Anxiety Ross Anxiety	= 1.236	= .808	= 1.398

Chart of Mean Anxiety Scores (Pilot Study)



HISTOGRAMS OF ANXIETY (PILOT STUDY)



Teacher Rating Instructions

1. Please rate each child in your class for speech proficiency in terms of:

    A. Bodily action
    B. Voice Control
    C. Language skills
    D. Organizational ability
    E. Speech fright or stage fright

2. Rate on the scale 1 through 5

    A. 5 denotes above average proficiency
    B. 3 denotes average proficiency
    C. 1 denotes below average proficiency

3. Circle the appropriate numbers in each category for each child.

____

[illegible] ____

[illegible] ____

[illegible] ____

[illegible]:

				1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
				1 2 3 4 5	1 2 3 4 5

Room______________________

Teacher Questionnaire

1. What does it mean to you when you say that a child should have good speech?

2. What does it mean to you when you say that a child has speech [illegible] or disparity?

3. Do you discuss speech [illegible] with individual students or with [illegible]? How frequently?

4. [illegible] to your [illegible] should speech be taught as [illegible] subject or [illegible] part of all other subjects?

5. [illegible] in your [illegible] should you call attention to [illegible] child speech [illegible]

6. [illegible] speech courses have you taken?______________________

____

1.

2.

3.

[illegible] needs:

1.

2.

3.

[illegible]______________________ Date______________________

____

[illegible]

Percentage Tables of Speech Fright
and Speech Ability scores
derived from this study

High Speech Fright Scores as shown by Researchers' ratings from observations at the Herman School.

6th	4th	2nd	kdg.	
32	27	30	26	N=115 Total N=245 %=46.9

High Speech Fright Scores as shown by teachers' ratings at the Herman School

6th	4th	2nd	kdg.	
8	21	20	6	N=55 Total N=245 %=22.4

High Speech Fright Scores as shown by Direct Questioning (car test) at the Herman School

6th	4th	2nd	kdg.	
19	15	10	11	N=55 Total N=245 %=22.4

High Speech Fright Scores as shown by Indirect Questioning (Puppet Test) at the Herman School

6th	4th	2nd	kdg.	
15	16	11	19	N=61 Total N=245 %=24.9

High Speech Fright Scores as shown by paper and pencil tests at the Herman School

6th	4th	2nd	kdg.	
25	5	6	6	N=42 Total N=245 %=17.1

High Speech Fright Scores as shown by paper and pencil tests at the Dossin and Holmes Schools

6th	4th	2nd	kdg.	
72	27	13	22	N=134 Total N=921 %=14.5

Poor Speech Abilities Scores as shown by Researchers' ratings from obvervation at the Herman School

6th	4th	2nd	kdg.	
11	9	16	18	N=54 Total N=245 %=22.0

Poor Speech Abilities Scores as shown by Teachers' ratings at the Herman School

6th	4th	2nd	kdg.	
8	25	3	5	N=41 Total N=245 %=16.7

Percentage table for Predictive Value of the Introspective Tests using Data derived from the Main Study

Direct Questioning (car test) and Researchers' Observations of Speech Fright (High, Low and Average Scores)

	Researchers' Observations of Speech Fright	Agreement of Researchers' Observations with Direct Questioning	% of Agreement
6th grade	66	30	45.4
4th grade	65	29	44.6
2nd grade	61	23	37.7
Kindergarten	53	18	33.9

Indirect Questioning (puppet test) and Researchers' Observations of Speech Fright (High, Low and Average Scores)

	Researchers' Observation of Speech Fright	Agreement of Researchers' Observations with Direct Questioning	% of Agreement
6th grade	66	28	42.4
4th grade	65	19	29.2
2nd grade	61	17	27.8
Kindergarten	53	16	30.1

Paper and Pencil Tests and Researchers' Observations of Speech Fright (High, Low and Average Scores)

	Researchers' Observations of Speech Fright	Agreement of Researchers' Observations with paper and pencil tests	% of Agreement
6th grade	66	24	36.3
4th grade	65	19	29.2
2nd grade	61	17	27.8
Kindergarten	53	13	24.5

Direct Questioning (ear test) and Researchers' Observations of High Speech Fright

	Researchers' Observations of High Speech Fright	Agreement of Researchers' Observations with Direct Questioning	% of Agreement
6th grade	32	13	40.6
4th grade	27	9	33.3
2nd grade	30	8	26.6
Kindergarten	26	7	26.9

Indirect Questioning (puppet test) and Researchers' Observations of High Speech Fright

	Researchers' Observations of High Speed Fright	Agreement of Researchers' Observations with Paper and Pencil Tests	% of Agreement
6th grade	32	10	31.2
4th grade	27	8	29.6
2nd grade	30	6	20.0
Kindergarten	26	8	30.7

Paper and Pencil Tests and Researchers' Observations of High Speech Fright.

	Researchers' Observations of High Speech Fright	Agreement of Researchers' Observations with Paper and Pencil Tests	% of Agreement
6th grade	32	15	46.8
4th grade	27	3	11.1
2nd grade	3	6	20.0
Kindergarten	26	4	15.3

Direct Questioning (ear test) and teachers' ratings of Speech Fright (High, Low and Average)

	Teachers' Ratings of Speech Fright	Agreement of Teachers' Ratings with Direct Questioning	% of Agreement
6th grade	66	22	33.3
4th grade	65	30	46.1
2nd grade	61	17	27.8
Kindergarten	53	24	45.2

Indirect Questioning (puppet test) and Teachers' Ratings of Speech Fright (High, Low and Average)

	Teachers' Ratings of Speech Fright	Agreement of Teachers' Ratings with Indirect Questioning	% of Agreement
6th grade	66	30	45.4
4th grade	65	23	35.3
2nd grade	61	29	47.5
Kindergarten	53	22	41.5

Paper and Pencil Tests and Teachers' Ratings of Speech Fright (High, Low and average)

	Teachers' Rating of Speech Fright	Agreement of Teachers' Ratings with Paper and Pencil tests	% of Agreement
6th grade	66	12	18.1
4th grade	65	28	43.0
2nd grade	61	34	55.7
Kindergarten	53	32	60.3

Direct Questioning (car test) and Teachers' Ratings of High Speech Fright

	Teachers' Ratings of High Speech Fright	Agreement of Teachers' Ratings with Direct Questioning	% of Agreement
6th grade	8	2	25.0
4th grade	21	9	42.8
2nd grade	20	2	10.
Kindergarten	6	2	33.3

Indirect Questioning (puppet test) and Teachers' Rating of High Speech Fright

	Teachers' Ratings of High Speech Fright	Agreement of Teachers' Ratings with Indirect Questioning	% of Agreement
6th grade	8	3	37.5
4th grade	21	7	33.3
2nd grade	20	5	25.0
Kindergarten	6	2	33.3

Paper and Pencil tests and Teachers' Ratings of High Speech Fright

	Teachers' Ratings of High Speech Fright	Agreement of Teachers' Ratings with Paper and Pencil tests	% of Agreement
6th grade	8	2	25.0
4th grade	21	4	19.0
2nd grade	20	4	20.0
Kindergarten	6	2	33.3

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AUTOBIOGRAPHY

Mr. Irwin R. Shaw was born February 24, 1932 in New York City and attended the city schools. After graduating from William Howard Taft High School in 1950, he attended the State University of New York at Geneseo. He received his B.S. degree with majors in the area of elementary education, speech and dramatic arts in 1957. He then attended the University of Denver where he received his M.A. degree in the areas of speech pathology and communications in 1956. While attending the University of Denver he worked at the Englewood Public Schools in Englewood, Colorado as a speech therapist. After graduation from the University of Denver he taught in the speech clinic at Highlands University in New Mexico for a summer. The following year he replaced an instructor from the speech department who was on sabbatical at Massachusetts State College at Bridgewater. During the next three years Mr. Shaw was at William Penn College in Iowa where he developed the speech curriculum, initiating both a forensic and dramatic arts program. Mr. Shaw was at Wayne State University from 1963-1966 where he had a teaching assistantship. For two years he served as one of the assistant coordinators of the regional forensic high school program He was the recipient of a Wolfram Grant during 1964-1965.